



USAID
FROM THE AMERICAN PEOPLE

ECONOMIC BASELINE SURVEY IN FIVE TARGETED COMMUNITIES SURROUNDING NYUNGWE NATIONAL PARK

FINAL REPORT



NOVEMBER 2011

This publication was produced for review by the United States Agency for International Development. It was prepared by the Center for Skills Development/Rwanda for DAI.

ECONOMIC BASE LINE SURVEY IN FIVE TARGETED COMMUNITIES SURROUNDING NYUNGWE NATIONAL PARK

FINAL REPORT

Program Title:	Strengthening Sustainable Ecotourism in and around Nyungwe National Park
Sponsoring USAID Office:	USAID/Rwanda, Office of Economic Growth
Contract Number:	AID-696-C-10-00002
Contractor:	Development Alternatives Inc. (DAI).
Date of Publication:	November 15, 2011
Author:	Centre for Skills Development Rwanda

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

TABLE OF CONTENTS

ACRONYMS	vi
ACKNOWLEDGEMENTS	1
EXECUTIVE SUMMARY	2
CHAPTER ONE	7
1.0 INTRODUCTION.....	7
1.1 THE SCOPE OF THE ASSIGNMENT/STUDY	8
1.2 Objectives of the Assignment.....	9
1.3 ORGANIZATION OF THE REPORT	10
CHAPTER 2: BRIEF DESCRIPTION OF PARTICIPATING COOPERATIVES.....	11
2.1 KITABI WOMEN HANDICRAFT GROUP (WH)	11
2.2 CYAMUDONGO CULTURAL COOPERATIVE (CY).....	12
2.3 THE PILLAR OF NATURE AND TOURISM PROMOTION (PNTP) BANDA CULTURAL COOPERATIVE	13
2.4 FRIENDS OF NYUNGWE.....	14
2.5 NYUNGWE NZIZA	15
CHAPTER 3: METHODOLOGY	16
3.0 INTRODUCTION.....	16
3.1 PREPARATORY STAGE	16
3.2 SURVEY ACTIVITIES	16
3.2.1 Preparation of the Survey Instruments (Questionnaire).....	17
3.2.2. Target Population	18
3.2.3 Sample Size and Sampling Criteria	19
3.2.4 Enumerators Training/Induction and Quality Control	19
3.2.5 Data Collection Process and Tools.....	20
3.3 DATA ENTRY AND ANALYSIS	22
3.3.1 Data Entry.....	22
3.3.2 Data Analysis.....	23
3.4 DESK RESEARCH/REVIEW	24
CHAPTER 4: RESULTS AND DISCUSSION	25
4.1 INTRODUCTION.....	25
4.2 SECTION 1: PERSONAL AND BASIC INFORMATION FOR MEMBER DATA 25	
4.2.1 Sample Size and Gender Distribution.....	25
4.2.2 Sample Age Distribution	26
4.2.3 Highest Education Levels	27
4.2.4 Marital Status.....	28
4.2.5 Number of Dependants.....	28
4.2.6 Type of Occupation	30

4.3	SECTION TWO: HOUSEHOLD DATA.....	31
4.3.1	Land ownership	31
4.3.2	Livestock Ownership	32
4.3.4	Household Saving and Borrowing	33
4.3.5	Ownership of Physical Assets	37
4.3.6	Household Income and Expenditure Analysis	40
4.4	SECTION THREE: SPATIAL DATA	47
4.4.1	Land.....	47
4.4.2	Water.....	48
4.4.3	Energy	49
4.5	SECTION FOUR: COOPERATIVES RELATED DATA	51
4.5.1	Membership Dates	51
4.5.2	Membership Benefits.....	51
4.5.3	Members Aspirations.....	53
4.6	LEADER AND FOCUS GROUP.....	57
4.7	GENDER REPRESENTATION	58
	CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS	60
5.1	CONCLUSIONS.....	60
5.2	RECOMMENDATIONS.....	61
	REFERENCES.....	62
	APPENDICES	63
	APPENDIX 1: WORK PLAN	63
	APPENDIX 2: QUESTIONNAIRES	64
	Questionnaire A: Coopératives Members	64
	Questionnaire B: Cooperative Leaders (Face To Face Interviews).....	72
	Questionnaire C: Sector leaders and other Opinion Leaders (Face to Face interviews).....	77
	APPENDIX 3: ENUMERATORS ITINERARY.....	80

Figures

Figure 1: Members of Kitabi Handicraft Waiting for an Interview.....	11
Figure 2: Members of FN waiting for an interview	14
Figure 3: Savings Levels in 2010	34
Figure 4: Borrowing Levels 2010.....	35
Figure 5: Savings and Borrowing Trends in Different Cooperatives.....	36
Figure 6: Sources of Water	48
Figure 7: Sources of Energy for Lighting.....	50
Figure 8: Showing Percent Household Income Improvements.....	52
Figure 9: Critical Needs and Aspirations of the Cooperatives (%).....	54

Tables

Table 1: Location of Cooperatives.....	8
Table 2: Gender Compositions of Sample Survey	9
Table 3: Initial Target Sample	18
Table 4: Final Sample Size	19
Table 5: Number of Opinion and Cooperative Leaders Interviewed	21
Table 6: Data Collection Dates.....	22
Table 7: Codes Given to Cooperatives.....	24
Table 8: Cooperative Sample Membership and Gender Composition	26
Table 9: Age Distribution for Individual Cooperatives.....	26
Table 10: Age Distribution for all Cooperatives:	27
Table 11: Highest Level of Academic Education	28
Table 12: Marital Status	28
Table 13: Percentage Number of Dependants	29
Table 14: Average Number of Dependants	30
Table 15: Occupation of Respondents	31
Table 16: Land Ownership	32
Table 17: Percentage of Land Ownership by Cooperative	32
Table 18: Percentage Livestock Ownership	33
Table 19: Type and Amount of Savings	34
Table 20: Trends in Savings, Borrowing, Lending and Remittances	36
Table 21: Asset/Durable Goods Ownership	38
Table 22: Type of Building Materials Used for House Construction	40
Table 23: Sources of Income and Annual Income Levels for Cooperative Members	41
Table 24: Monthly Income Levels for all Cooperatives	42
Table 25: Monthly Income Levels for Individual Cooperatives	42
Table 26: Participation of Cooperative Members in other Income Activities	42
Table 27: Expenditures on Food Items During the Last Month (July 2011).....	44
Table 28: Expenditures on non-Food Items Last Month (July 2011) in RWF	45
Table 29: Annual Expenditure on non-Food Items	45
Table 30: Summary of Major Monthly Expenditure Costs	46
Table 31: Availability for Mutuelle Medical Insurance for Family Members	47
Table 32: Form of Land Ownership	47
Table 33: Adequacy of Land to Family Needs.....	47
Table 34: Land Ownership Document.....	48
Table 35: Distance Covered to Go to Water Sources.....	49
Table 36: Utilities.....	51
Table 37 : Year of Joining the Cooperative	51
Table 38: Rating of the Leadership of the Cooperative by the FGD.....	55

Table 39: Individual Cooperative Challenges	56
Table 40: Membership Gender Representation	58
Table 41: Sample Gender Representation	58

ACRONYMS

BN	Banda PNTTP
CSD	Centre for skills development Rwanda
CY	Cyamudongo TP
DAI	Development Alternatives Inc.
DNP	Destination Nyungwe Project
EDPRS	Economic Development and Poverty Reduction Strategy
FN	Friends of Nyungwe
FGD	Focus group discussion
GOR	Government of Rwanda
WH	Kitabi Handicraft Women Cooperative
MINAGRI	Ministry of Agriculture
MINECOFIN	Ministry of Finance and Economic Planning
NN	Nyungwe Nziza
NNP	Nyungwe National park
RDB	Rwanda Development Board
RHDS	Rwanda Health and Demographic Survey
SSENNP	Strengthening Sustainable Ecotourism in and around Nyungwe National Park
SPSS	Statistical Packages for Social Sciences
ToRs	Terms of Reference
USAID	U.S. Agency for International Development

ACKNOWLEDGEMENTS

We would like to acknowledge the support of the Development Alternatives Inc. and that of United States Agency for International Development (USAID) in making this Economic baseline survey in targeted cooperatives (Impact Nyungwe Contest winners) possible.

Special thanks go to Jim Seyler the Chief of Party for endorsing and committing staff time for the field visits and during the conducting of interviews for the various cooperatives. We would like to graciously thank all staff of DAI SSENNP for availing themselves throughout the process and supporting the consultant throughout the consultancy. Their support made this survey enjoyable.

Finally we wish to thank all the cooperatives members who graciously waited for us and cooperated through the survey. They are and will be the impact winners.

EXECUTIVE SUMMARY

Rwanda is an emerging tourist destination, and Nyungwe Nziza seeks to help the country reach its tourism potential. To do so, the project targets the spectacular and protected Nyungwe National Park (NNP), focusing on inclusive ecotourism development for the benefit of local communities surrounding the park, and leveraging private sector investment in the management, construction, and maintenance of new and existing park infrastructure.

The Rwanda Strengthening Sustainable Ecotourism in and around Nyungwe National Park (SSENNP) Program is funded through the U.S. Agency for International Development (USAID) mission in Rwanda under contract number AID-696-C-10-00002 issued on March 24, 2010 with a programmed project completion date of March 23, 2015.

The Nyungwe Nziza project is working to transform NNP into a viable ecotourism destination, capable of generating employment and sustainable and equitable income for local communities and other stakeholders, thus providing economic incentives to conserve the rich biodiversity of the Park. The ultimate goal is a thriving economy in NNP with engaged communities and a private sector that realize they can benefit economically by protecting and leveraging the unique environment in which they live and work.

In order to measure the envisaged changes, Development Alternatives Inc. (DAI) commissioned this study/survey with the objective of establishing a socio-economic baseline so as to capture and establish the baseline qualitative and quantitative data that will be used for measuring the economic impact of Nyungwe Nziza's small grants program on the targeted cooperatives (Impact Nyungwe Contest winners) surrounding Nyungwe National Park and assess the prevailing economic status among cooperative members. The Cooperatives selected to participate were: Banda PNPT (BN) in Nyamasheke District, Friends of Nyungwe, Kitabi Women Handicraft Group (WH), Nyungwe Nziza, and Community based tourism Group, all three in Nyamagabe District, and Cyamudongo Tourism Promotion (CY) in Rusizi District. The Nyungwe Nziza (NN) Cooperative members located at Uwinkingi Sector will be used as a control group given that it will not be participating in the SSENNP Program.

The total number of participants interviewed were 243 or 70 % of all five cooperative members, including 66 men and 111 women, 31 cooperative leaders and 35 opinion leaders and all members of Nyungwe Nziza (NN) – the control group for this study were interviewed.

Key Findings of the Survey

It was noted that the cooperative members age range is between 15 -74, with an age group of between 14- 44 making 67% of the total membership. The highest education level for most of the respondents (61%) was primary education. Regarding marital status, 72% of the respondents are married and on average have four (4) dependants per couple.

Like in most of rural Rwanda, the biggest numbers of the respondents (70%) have farming (subsistence farming) as their main occupation, and this was indicated by the fact that 82% of the respondents own land. Again on the subsistence level, animal husbandry is undertaken in all the three locations where the survey was carried out with most of the respondents (38%) breeding pigs, followed by 35.3% who breed goats and 31% breeding cows.

As it is the case in the whole country, a large number of people do not resort to saving money and in this survey the results show that 59% (107 respondents) made some savings in the year 2010, most of them preferring to save their cash through the bank. Though different cooperatives show different trends in their saving habits, on average each member saved Rwf 27,390 per year. Cooperative members also indicated that they had borrowed money (26%) in the course of the year, which was used for the following activities amongst others: agriculture and animal husbandry, building houses, business, household issues, purchase of land, wedding and school fees.

As individuals' wealth increases, so does their consumption of durable goods. It was noted that (56.4%) members own a mobile phone. The most popular media item is the transistor radio with 66.72 % of the respondents owning one. 13.8% of respondents have a bicycle as their means of transport.

It was gratifying to note that 75.5% of the respondents own their homes. Out of these; (40%) have predominantly erected their houses using mud and timber poles and roofed either with fired tiles (49%) or iron sheets (20%). The floor is mostly made of raw earth (62 %.)

The income levels of the members of different cooperatives were found to be varied with 64.5% of the respondents receiving a monthly income between Rwf 10,000 and Rwf 60,000. The main sources of income are: farming, trade/business/tuck shops, self employment (craft industry), employment rent/interest/dividends, transfer income (remittances) and from cooperative activities. Some specific income-generating activities

members of cooperatives are engaged in include: cleaning work, making charcoal, making sorghum beer, tailoring, bricks making, small scale business, mechanics, night watching, making timber, making radical land terracing (to avoid soil erosion), crafts industry and carpentry. The annual incomes for individual members vary between Rwf 110,191 and Rwf 379,342 (US \$184 to US \$ 632).

The expenditure pattern is closely related to the spender's wealth. Expenditure was reviewed on monthly basis for food and non food items covering the last month prior to the survey and on the non food items (clothing, footwear, durable goods, education, medical care, travels repairs and maintenance and social events amongst others) which are mainly purchased or used on annual basis. The average expenditure on food and non food items per month is Rwf 2,742 and Rwf 2,680 respectively. The average annual expenditure on non food items is Rwf 20,723 with education being the highest expenditure area for all the members of the five cooperatives with an average annual expenditure of Rwf 51,343. It also has the biggest spread with FN members having the highest expenditure at average of Rwf 115,553 and NN members having the least expenditure at Rwf 333. Though expenditure for medical care averages Rwf 6,619 and spreads between Rwf 3,902 and Rwf 9,766, it was comforting to find out that most of the respondents (89.4 %) had a healthcare insurance.

Due to the favorable weather conditions in the Nyungwe area, water was found not to be a key challenge to household needs as indicated by the fact that 77 % of the respondents indicated that they get water for free (from rivers , wells, springs, or designated water point) with only 8.3% buying water. The longest distance that members go to fetch water is about 4000m from their homes. The team did not assess the actual quality of water as this activity plus the equipment for testing was not included in the scope of work.

The main sources of energy are firewood and charcoal for cooking, and kerosene and dry battery cells for lighting. Most of the respondents (99.6%) use firewood for cooking and 3.9% use it for lighting. Kerosene (49.45%) and dry battery cells (35.6%) are the main source of lighting with only 9.4 % using electricity.

All the cooperatives were found to be still young and growing and most of them were started as associations as early as 2003. Most cooperatives got the majority of their members (44%) in 2009, while 13% of the members joined the cooperatives this year (2011).

The benefits that members accrue from the cooperative can be categorized as social and economic. Most members seem to get more social than economic benefits given that 46.1% of the members assert that their household incomes have not improved since they joined

the cooperative. This can be attributed to the fact that this was the initial aim of setting up the association which later transformed to cooperatives. Thus, the cooperatives have not fully evolved into organization with a commercial motive. Social benefits members get from the cooperative include:

- Building relationship with cooperative members.
- Exchanging knowledge and skills.
- Financial help from colleagues.
- Good health for children through learning on various issues.
- Mutual assistance in times of needs.
- Improvement of their welfare.
- Learning to read and write.
- Training on environmental protection.
- Rwandan culture development (a chance and an opportunity to learn cultural dances).
- Education.
- Socialization and Networking with colleagues and international people as well as socialization.

The cooperative members aspire to see their cooperatives grow and become stronger in various areas so that it can assist them to improve their welfare. The improvements and assistance they are looking for in the next two year include training (36%), financial assistance (30%), marketing of their services and products, infrastructural support, purchase of machines and equipments amongst others.

The respondents seek training in the following areas among others: financial and project management, cooperative management, environmental protection, business plans and management, customer care and basic language skills (English) and making of handicrafts.

As noted from the assessment by the opinion leaders on cooperative leadership in their areas, training - especially in cooperative management - is crucial as most of the cooperative management teams were rated as good (average). The opinion leaders concurred with the respondents on the need to develop the capacity of the cooperatives.

The above can be viewed in terms of challenges the cooperatives face, which also includes:

- Income for the cooperatives still too low.
- Lack of enough working capital.

- Lack of enough skills in cooperative management.
- Poor general basic management skills.
- Lack of opportunity to get income from NNP.
- Lack of clear vision.
- Lack of access to the market.
- Challenges of marketing cooperatives products and services.
- Lack of modern machines.
- Lack of Cooperative offices/ identifiable locations to run cooperative activities and with limited resources for construction the available sites.

All in all, it can be concluded that the economic levels of the targeted cooperatives are low and interventions would assist in alleviating this. We therefore propose the following:

- Assisting cooperatives in formalizing their activities and enabling them to move away from the social realms to economic realms. They need to redefine their vision and get more focused.
- In assisting cooperatives they should be approached differently, representing and reflecting on the member diversity in education, age, and marital status.
- Encourage members to save and have a borrowing mechanism at a small fee from the cooperatives.
- There is a need to redefine specific training needs as there are varied requirements within cooperatives. This could be done through training needs assessment for the cooperatives. And thereafter offering the training as per their needs.
- Assist the cooperatives to improve and access markets as well as add market value to the cooperative products and goods. This would in turn assist them to improve on their income levels.

CHAPTER ONE

1.0 INTRODUCTION

Rwanda is an emerging tourist destination and the Strengthening Sustainable Ecotourism in and around Nyungwe National Park (SSENNP), otherwise known as “Nyungwe Nziza” is a project that is helping the country reach its tourism potential by targeting the spectacular Nyungwe National Park (NNP), focusing on inclusive ecotourism development for the benefit of communities surrounding the park, and leveraging private sector investment in the management, construction, and maintenance of new and existing park infrastructure.

The project’s objective is to help transform NNP into a viable ecotourism destination capable of generating employment, sustainable and equitable income for local communities and other stakeholders, thus providing economic incentives to conserve the park’s rich biodiversity. The goal is a thriving economy in NNP with engaged communities and a private sector that benefit economically by protecting and leveraging their unique environment.

The focused goal of the Nyungwe Nziza Project is to ensure the capability of the project to assist the participating stakeholders to generate employment and sustainable and equitable income for local communities and other stakeholders. It was therefore necessary to undertake a baseline survey to get an in-depth analysis of the cooperative members at this initial stage through the collection of data from as many cooperatives and respondents as possible. The aim is to know where the project is starting from and use the same information to measure success at periodic intervals during Project implementation. As noted by United Nations World Food Program, a baseline study forms the basis for a 'before and after' assessment or a 'changeover time' assessment. Without baseline data to establish pre-operation conditions for outcome and impact indicators it is difficult to establish whether change at the outcome level has in fact occurred

The Rwanda Cooperative Agency defines a cooperative as an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically controlled enterprise. The members have equal rights and duties take part democratically in the management and administration of the company of which they share the duties and the advantages proportionally with the transactions of each member. The fundamental objective of a

cooperative is not "to maximize the profits" as in a capitalist company, nor to act initially like "actor of a social change" as in the non-profit-making associations, but "to maximize the benefit which the member users can obtain from their commercial transactions with the cooperative."

Cooperatives are instruments used to alleviate poverty and to accelerate agricultural production in Rwanda. Similarly, cooperatives contribute to the achievement of the Millennium Development Goals, Vision 2020 and the Economic Development and Poverty Reduction Strategy (EDPRS) program that focuses on rural economic transformation, human resource development, development and promotion of the private enterprises and poverty alleviation

1.1 THE SCOPE OF THE ASSIGNMENT/STUDY

The main aim of this study was to assess the economic status among the participating cooperative members of five cooperatives that surround the Nyungwe Forest and are participating in the "Nyungwe Nziza" project namely Banda PNPT (BN), Friends of Nyungwe (FN), Kitabi Women Handicraft (WH), Cyamudongo Tourism Promotion (CY) and Nyungwe Nziza Cooperative (NN) that was to be used as a control group. Spatially, the study was carried out in the following three administrative Districts areas: Nyamagabe in Southern Province and Nyamasheke and Rusizi District in the Western province. Table 1 shows that the majority of the cooperative respondents were from Nyamagabe District (58.3%). The respondent members were spread across 51 Sectors.

Table 1: Location of Cooperatives

Location	Frequency	Percent
NYAMAGABE	105	58.3
NYAMASHEKE	40	22.2
RUSIZI	35	19.4
Total	180	100

The survey was limited to an agreed sample population of 70 % for the participating cooperatives and 100 % survey for the control cooperative. In total, 180 members were interviewed, which 111 (62 %) were women and 69 (38%) were men (Table 2).

Table 2: Gender Compositions of Sample Survey

<i>Gender</i>	Frequency	Percent	Valid Percent
<i>Men</i>	69	38.3	38.3
<i>Women</i>	111	61.7	61.7
<i>Total</i>	180	100.0	100.0

1.2 Objectives of the Assignment

The objective of this study was to conduct an economic baseline survey in targeted cooperatives (Impact Nyungwe Contest winners) surrounding Nyungwe National Park in order to:

- Assess the prevailing economic status among cooperative members; and
- Capture and establish baseline qualitative and quantitative data for measuring the economic impact of Nyungwe Nziza's small grants program, i.e., changes in cooperative member income, productivity and employment status.

This was a 40 day consultancy assignment which covered pre-study activities, research/data collection in the field and reporting. The assignment deliverables as per the agreed timelines were an Inception Report, Progress Report, Draft Report and a Final Report.

The role of the CSD was to carry out the baseline survey on behalf of DAI as per the terms of reference provided and report on the same. See Appendix 1 for the agreed work plan between the DAI and CSD. Having the knowledge that a baseline study gathers key information early in an activity so that later judgments can be made about the quality and development results achieved of the activity, we approached this study using known methods and concepts which are measureable and can be reviewed periodically by the Nyungwe Nziza project to measure its impacts on participating cooperatives. We used three broad approaches and components to undertake this baseline survey.

Component 1: Pre Survey Activities:

This covers the broad areas of negotiation and signing of the contract, the developments of the questionnaires, exchanges of data between CSD and the client, and the field assessment visit by CSD and DAI team for activity mapping which included, meeting the cooperatives officials, the recruitment and training of the enumerators.

Component Two: Survey activities.

This involved the actual survey field work and included the following activities;

- Pretesting of the questionnaires.
- Adjustments of the questionnaires.
- Data collection in the field both qualitative and quantitative.
- Data entry and analysis.

Component Three: Report Writing

There were four reporting activities for this assignment, namely: the inception report, the progress report (presentation to DAI), draft report and final report. In this case of the final report an initial draft report was produced for comments by all concerned and then the final report incorporating all comments constitutes of this document.

1.3 ORGANIZATION OF THE REPORT

The report is presented in five parts including the executive summary. The first part is the introduction which generally highlights the project background part of the report. The second part consists of basic background information on the participating cooperatives. In the third part, the approach and method of the process aspect of the survey are presented. The fourth part includes the results and discussion of the survey and the final part consists of conclusion and recommendations from the survey.

CHAPTER 2: BRIEF DESCRIPTION OF PARTICIPATING COOPERATIVES

2.1 KITABI WOMEN HANDICRAFT GROUP (WH)

The Cooperative is located in Kitabi sector, Nyamagabe District, Southern Province and draws its members from two sectors, Kitabi and Uwinkingi. It was transformed to a cooperative in 2008 with 118 active members, one of whom is a man. Previously they used to operate as an association. The current membership is 56. Their main function is making handicrafts and dancing.

The goal of the Basket, Tourism Pillar of Nyungwe project is to mitigate the difficult living conditions of the women of the Kitabi Sector.

The objectives of the project are the following:

- To improve living conditions through the creation of income-generating activities for Kitabi women.
- To learn by doing from peers.

The cooperative is composed of 56 members, 7 of them serving in the executive committee.

Figure 1: Members of Kitabi Handicraft Waiting for an Interview



2.2 CYAMUDONGO CULTURAL COOPERATIVE (CY)

The cooperative is located in Cyamudongo, part of the Nyungwe National Park in Nkungu Sector, Rusizi District.

It was formed in 2009 with 86 members including 22 men. This cooperative started in 2009 as a handicraft association with the added component of a cultural troop. The cultural troop has composed songs that were used in different government gatherings and also participated in Rwanda FESPAD where it won a prize for the Western Province. The Cyamudongo handicraft association then turned into the Cyamudongo Tourism Promotion Cooperative in 2010 and currently has 76 active members (46 women and 30 men) from Nkungu, Nyakabuye and Gitambi Sectors all around Cyamudongo forest.

The goal of Cyamudongo Cultural Sanctuary Project is to reduce poverty by empowering the local community through the tourism sector, thus providing access to other income-generating activities and reducing its dependency on agriculture or illegal activities in NNP. Specifically the objectives of this project are the following:

- Generate direct income to the communities living adjacent to Cyamudongo;
- Generate direct and indirect income for the local community, thus creating incentives for conservation of NNP ;
- Promote the sustainable use of natural resources;
- Reduce the threats to biodiversity by educating the local community
- Provide facilities to chimpanzee-tracking tourists and diversify the attractions available to them
- Integrate the marginalized Cyamudongo population into the tourism industry so that they can benefit from tourism income

The cooperatives current main activities and products include:

- Basket weaving, different types of handicrafts including banana fiber chairs and table, trays etc.,
- Cultural dance troupe.

The cooperative is managed by its members and headed by the elected administration committee of 7 people, including auditors. It is closely supervised by District and Sector authorities and is often visited by park authorities for the purpose of sensitization and service delivery. At the District level, CTPC closely collaborates with the cooperatives officer and reports to the sector agronomist.

2.3 THE PILLAR OF NATURE AND TOURISM PROMOTION (PNTP) BANDA CULTURAL COOPERATIVE

The PNTP cooperative is located in Banda Cell, Rangiro Sector, Nyamasheke District, Western Province. It is located in a region surrounded by the Bigugu and Cyurugeyo mountains in NNP and the chain of hills of Gateko located in front of Kivu Lake. Most of the members are drawn from two Sectors namely: Cyato and Rangiro with the majority coming from the Banda Cell.

The Banda community is located at the bottom of a valley against the edge of NNP, an area with a distinct advantage of hosting the largest habituated chimpanzee group (Mayebe) for roughly three months out of the year as well as other primates such as the Colobus and Mangabey. The cooperative is involved in tourism promotion around Nyungwe National Park (NNP).

PNTP began in 2003 and has a total of 92 members, 45 men and 47 women. The cooperative has provided the working Banda community with a site for its activities in Banda. Banda village offers an unexploited Community Based Tourism Product, that comprises of a 1-2 hour community walk, taking tourists through the community, stopping off at houses where banana-beer-making, maize-grinding, blacksmithing, and traditional medicine preparation are performed and explained. They have also established a traditional home and a King's Palace, a small but rarely utilized campsite with about 8 tents. The cooperative also has members who have received trainings in guiding, receiving tourists, and cooking.

The goal of the Ecotourism Strengthening in Banda Project is the promotion of biodiversity, conservation, and self-development.

The project objectives include:

- To improve the Banda community tourism campsite and village walk in order to increase the number of tourists visiting this region as well as their duration of stay.
- To improve the savings of the cooperative members and expand future economic opportunities for the Banda village population.
- To reduce poverty among the members of the cooperative and the population surrounding the village as result of increased sale of handicrafts and the provision of entertainment to tourists.

The current main activities of the cooperative are:

- Community tourism
- Hotel/Camp services

2.4 FRIENDS OF NYUNGWE

The Friends of Nyungwe Cooperative (FN) is a community-based tourism initiative located in the Southern province, Nyamagabe District, Kitabi Sector. It draws members from 5 Sectors (Buruhukiro, Gasaka, Kitabi, Tare, Uwinkingi) with the majority coming from Kitabi Sector about 200 meters from Kitabi –Nyungwe highway.

FN was established in 2007 and registered at the national level in 2009. The head office is located in Kitabi Sector, Nyamagabe District, near the RDB Kitabi Office, at the entrance of NNP, eastern side. FN has 54 members, 16 women and 38 men. This number continues to increase with the registration of new groups of beekeepers, former hunters, and marginalized people who were depending on the natural resources of NNP. As a cooperative, FN has its structures, including a board and committee of control, its vision, its mission, and its core values.

Figure 2: Members of FN waiting for an interview

Besides, the current CBT initiative, the cooperative has 300 mushroom growers and their main goal is to promote mushroom growing and fruits for a balanced nutrition and good health. The vision of this cooperative is to grow enough mushrooms for both consumption and sale to generate income and also add value to mushrooms by developing improved conservation and transformation techniques.



The goal of this project is to increase the awareness of biodiversity protection and to benefit the local community by developing community-based tourism.

The objective of the cooperative are:

- To develop and build a cultural village in which the local population will conduct activities to attract visitors before and after visiting NNP.
- To provide members of the local community with alternative sources of income linked to biodiversity conservation in NNP including making and selling traditional baskets, pots, and woodcarvings.

2.5 NYUNGWE NZIZA

Nyungwe Nziza, Community based tourism is located in the Southern province, Nyamagabe District, Kitabi Sector about 2 km from Kitabi trading centre. It draws members from three sectors namely Mukingi, Rugogwe and Uwinkingi.

Initially Nyungwe Nziza started as a club with the aim of conserving NNP's biodiversity and to increase income among members. Later formed as an association, in October 2009 they were legally authorized to operate as a cooperative with 30 active members. Currently it is composed of 24 members (10 men and 14 women).

The cooperative is still developing and enthusiastic and aims to develop into a sustainable commercial enterprise although they have never received any support from any organization.

The cooperative is involved in medium scale farming of (Irish potatoes, maize, and millet flour) and they sell their produce to public markets around Kitabi and Nyamagabe. The cooperative also has a cultural troop which is occasionally hired by RDB Kitabi whenever they have functions/events. The troupe is also hired at sector level for social events. They also make some handicrafts, but due to the poor quality of the products, they have not been able to sell any of them to tourists and local markets.

CHAPTER 3: METHODOLOGY

3.0 INTRODUCTION

This Chapter outlines the broad approaches and methods that have been used to successfully undertake this Baseline Survey Study. This has involved the following activities: preparatory stage, mobilization, consultative meetings, clients debriefs desk studies, key informants interviews, and design of survey instruments, pre-planning and evaluation of strategic options.

3.1 PREPARATORY STAGE

The stage involved mainly the commissioning for the study through:

- Agreement of a refined and definitive work plan between CSD and DAI as agreed upon on July 8, 2011 (see Appendix 1 for the work plan).
- Consultant team mobilization which consisted of the Team-leader, Consultant/Coordinator, Data Entry Executive, and the Enumerators.
- Consultative meeting with DAI (1st, 5th and 8th July 2011)
- Site visits for activity mapping of the cooperatives' activities, location and numbers and to set tentative dates of starting the survey and the interview venues by the CSD and DAI team This was done on 17th, 18th and 19th July 2011 and 8th August 2011. Five cooperatives involved were visited (namely Banda PNTTP, Friends of Nyungwe Forest, Kitabi handicraft women and Cyamudongo Tourism Promotion and COGEPENYA).
- Refining of the Cooperative list, which stood at 248 members instead of the previously thought 267 members in all the five participating cooperatives.

3.2 SURVEY ACTIVITIES

The survey activities can be categorized into six (6) key activities though some were overlapping. These include:

- **Activity 1** - Preparation of survey instruments.

- **Activity 2** - Review of the sample size.
- **Activity 3** - Training/Induction of enumerators.
- **Activity 4** - Presetting and adjustments of questionnaires.
- **Activity 5** - Data collection in the field, both qualitative and quantitative.
- **Activity 6**- Data entry and analysis.

3.2.1 Preparation of the Survey Instruments (Questionnaire)

From the given terms of reference, CSD developed draft questionnaires which were targeted towards collecting primary information on individual members and the cooperatives and also the views on the cooperatives and cooperatives activity from non partisan persons (opinion leaders). The same were as well shared with the DAI team for comments and review. The initial drafts were well reviewed and all agreed upon between 14th and 22nd July 2011. In the final analysis after all discussions, it was agreed that there will be three (3) questionnaires for the survey. (See appendix 2).

These are:

Questionnaire A: Cooperative Members.

Questionnaire B: Cooperative leaders.

Questionnaire C: Sector leaders and other Opinion Leaders.

The questionnaires were developed based on the known number of concepts that would facilitate in capturing the basic and correct data on the current economic status of the members of the cooperatives being surveyed.

The questionnaire to the members (Questionnaire A) was most critical in gathering and providing basic social economic status of cooperatives members. Questionnaire B (Cooperative leaders) and Questionnaire C (Sector leaders and other Opinion Leaders) were used to gather data that would support and verify the information gathered from the members.

The concepts followed to develop Questionnaire A were:

- **Section 1: Personal and Basic information for member data**
Data collected included family size, education level, employment/occupation, marital status, within the household, and how long they have been living there.

- **Section 2: Household Data.**

Questions on household income and expenditures, assets ownership of radios, bicycles, motorbikes, number of livestock and land size were all constructed with the aim of providing a basic measure of wealth per cooperative member.

- **Section 3: Spatial data.**

Questions about the structure of the house and land ownership which further enhanced the understanding of the cooperative member's wealth status were covered in this section.

- **Section 4: Financial and Economic Data.**

The questions in this area were designed to assist in obtaining a very direct understanding of the respondent's income and global utilization of that income.

- **Section 5: Infrastructure Data.**

The questions about the waste sources and the distance of the water source, source of energy for cooking and lighting and the costs of utilities per months.

- **Section 6: Cooperative data**

The questions here were more open ended but were aimed at helping to capture the information of the members in relationship to the cooperative, and more specifically, to review the impact of the cooperative on the member's income levels.

3.2.2. Target Population

As noted earlier the target population was the membership four cooperatives that are spread over four districts in Western and Southern Province whose membership currently stands as follows:

Table 3: Initial Target Sample

COOPERATIVE	TOTAL MEMBERSHIP	MEN	WOMEN
Banda PNPT	92	45	47
Friends of Nyungwe	54	38	16
Kitabi Handicraft	56	1	54
Cyamudongo Tourism Promotion.	76	30	46
Cogepanya	20	20	0
Total	297	124	163

3.2.3 Sample Size and Sampling Criteria

The initial samples size was expected at 95% which would have covered 282 persons and this would have been arrived at using the universal sampling method to select the sample from members of the four cooperative for this study. Universal sampling is when all elements in the targeted population are selected for inclusion in the sample without any bias. For the control group cooperative 100% sample was to be used.

After the site visits/mapping exercises and ascertaining the correct and current number of members for each cooperative, CSD and DAI agreed to reduce the sampling percentage from 95% to 70%. Table 3 shows the results current membership and sample size based on 70% of the membership. To ensure a non biased sample, we used the universal random sampling method after which we identified the names of the persons to be interviewed.

Further to this, the initial survey control group was COGEPENYA which later was change to Nyungwe Nziza Cooperative. And the final sample size for the study was as follows.

Table 4: Final Sample Size

S/N	COOPERATIVE	MEMBERS	SAMPLE
1	Banda	53	41
2	Cyamudongo	50	35
3	Friends of Nyungwe	65	44
4	Women Handicraft	56	40
5	Nyungwe Nziza cooperative	24	24
	Population	248	184

For the focused group discussion, the survey used a purposive sampling method to select, local leaders, and RDB staff. The selected interviewees were from those who could provide relevant information, e.g., sector leaders, cooperatives leaders, and/or people who have been working directly in the Project and/or Project area (e. g RDB staff). All cooperative officials were interviewed.

3.2.4 Enumerators Training/Induction and Quality Control

CSD identified and recruited a team of enumerators whose task was to collect data from each of the identified cooperatives members, its leaders and opinions leaders. The enumerators who were recruited for this study from CSD's research assistants' databank

and are all graduates and highly experienced interviewers. They were also very familiar with the local environment where the cooperatives are located. They conducted the survey under the guidance of a Team Leader.

To ensure that the enumerators understood their roles and ensure quality work, a one day training was held in Kigali on 23rd July 2011. The team was trained on the questionnaire and their roles and responsibilities in the survey. The aim of the training was to conceptualize the questionnaire and practice interviews. During the training session the Data Entry Executive was also present to ensure that the whole team understood the importance of the data and what required to be done.

The training session involved reading and building consensus of the meanings of the questions in the questionnaire, clarifications given and managed and other issues on the questionnaire were raised and resolved. Interactive and fun methods were used for the training.

The training agenda covered the following:

- Introduction & survey background.
- Getting familiar with and discuss the questionnaire.
- Questions & answers.
- Setting interview dates for every surveyor.
- Taking copies of questionnaires for every enumerator.

3.2.5 Data Collection Process and Tools

3.2.5.1 Data Collection.

For purposes of ensuring survey quality and data collection, the following three methods of data collection were adopted:

- Quantitative data collection (Questionnaires).
- Qualitative data (face-to-face discussions).
- Desktop review of relevant documents from the client and other sources.

The enumerators interviewed each of the selected interviewees, guiding them through all the sections of the questionnaire all the sections as highlighted earlier. The enumerators ensured clarity to the questions and unless where the interviewee did not volunteer

information or indicated that they did not want to answer, all questions were covered. This was the case on some questions especially those concerning wealth and family issues.

Face-to-face interviews with cooperatives leaders and opinion leaders (Table 5) were also used in the survey. The aim - as noted earlier - was to obtain deeper insights into some of the emerging survey issues.

To ensure that the main issues of the survey were captured, the following groups and individuals were interviewed.

- Cooperative members.
- Cooperative leaders.
- Executive Secretary of the Sector
- Social Affairs of the Sector
- Executive secretary of the Cell.
- District Cooperative Officers.
- District Executives (Economic or Social Affairs).
- Other local opinion leaders (RDB Officers, tour guides)

Table 5: Number of Opinion and Cooperative Leaders Interviewed

Cooperative	No of Opinion leaders	Number of Coop leaders
BN	5	9
CY	8	7
FN	4	4
NN	6	7
WH	8	8
Total	31	35

3.2.5.2 Data Collection Timings

Table 6: Data Collection Dates

Name of Cooperative	Data Collections Dates	N° of Members Interviewed	N° of Leaders Interviewed	Opinion Leaders Interviewed
Banda PNPT	Friday 29 th July -2011 Till finalized	40	9	5
Cyamudongo TP	Monday 1 st August 2011- Till finalized	35	7	8
Kitabi Women Handicraft Cooperative	Monday 1 st August 2011 Till finalized	40	8	8
Friends of Nyungwe	Thursday 4 th August 2011 - Till finalized	38	4	4
Nyungwe Nziza	16 th 17 th and 18 th August 2011	24	7	6

3.2.5.3 Fieldwork Quality Control

Having conducted the site visits during our initial data collection process, CSD ensured that measures of quality control were taken in all other stages of the survey. The Team Leader visited some of the sites where the interviews were being conducted to ensure that all was done as instructed. In addition to this, all the enumerators were accompanied by DAI staff. To ensure good quality work, some of the procedures that were put in place included: having highly qualified team of enumerators, accompaniments and spot checks, a 100% field checking questionnaires, debriefing, and communications with the CSD Office.

3.3 DATA ENTRY AND ANALYSIS

3.3.1 Data Entry

Data was collected using the standardized questionnaires and these were checked and verified before the coding process. After data entry, the data file was exported into MS Excel for data “cleaning”, scrutiny of skip patterns, consistency checks, sorting cases of open-ended questions, and post coding of questions. Finalized data were then exported to Statistical Package for Social Sciences (SPSS) where a log frame had already been prepared and compiled for the purpose of analyzing and preparing tables of the results. These results were then used for interpreting and preparing the study findings.

3.3.2 Data Analysis

The collected data was analyzed using SPSS for Windows 16.0, where a log frame had been created according to the questionnaires and from this the outcome was generation of analysis tables, means, medians, frequencies, cross-tabulations, percentages and descriptive representations of various statistical parameters from the collected data

Following the analysis, the information was then summarized using Excel so as to capture the means and help in coming up with representative tables and charts. The whole process of data entry and analyses took two weeks.

3.3.2.1 Quantitative Analysis

Data analysis presents qualitative and quantitative results and consideration. The primary data gathered in the household survey had to be compared to secondary country data obtained in interviews with the focus group members and cooperative leaders, reports received via internet amongst other documentation to see if the trend matches what has already been found out from other studies.

Descriptive statistic tools: These have been used to analyze the results. The measure will be used to analyze the respondents' social and economic information, such as distribution of respondents according to age, gender, education levels, business categories and years of experience in business. Tools used included the use of frequency, percentage, means, cross-tabulation, median, standard deviation, as well as statistical graphs and charts.

Qualitative Analysis: Descriptive statements were used to substantiate quantitative data particularly from the data obtained from interviews with key informants, group discussions and field observation. SWOT analysis was employed to identify strengths, weaknesses, opportunities and threats of the impacts of the project to the cooperatives participating in the program.

For ease of reference in identifying different cooperatives in data entry and analysis, the following codes were given.

Table 7: Codes Given to Cooperatives

Cooperative	Code
Banda PNTTP	BN
Cyamudongo TP	CY
Kitabi Handicraft Women Cooperative	WH
Friends Of Nyungwe	FN
Nyungwe Nziza	NN

3.4 DESK RESEARCH/REVIEW

In addition to the above results from the analyzed data, CSD referred to various relevant documents available. There is minimal documentation from DAI-Nyungwe Nziza project taking into account that the project has only been in existence for about one year. But reference has been made to similar studies made elsewhere in Rwanda that are of relevance to our survey.

CHAPTER 4: RESULTS AND DISCUSSION

4.1 INTRODUCTION

This chapter presents results of the responses to questions that were posed to cooperative members about their socio-economic status. Different approaches for analysis have been used guided by the results obtained from the analysis of the questionnaires.

Frequencies were used to analyze the data with resultant percentages to show the responses from the respondents. Valid and cumulative percentages were used to measure the frequencies. The variable degrees are split into the possible answers by the respondents and their absolute (frequency) and the relative (percent) frequencies are shown, as well as the percentage and cumulative percentage of valid cases (valid percent and cumulative percent).

Percent calculates the relative frequencies including the missing cases. However, valid percent calculates the relative frequencies excluding the missing cases, so that the relative frequencies of the valid cases count up to 100 % while the cumulative percent is the additional of valid percentages to show incremental frequency. Depending on the weight of the question all these tools were used.

Graphical representations (pie charts) were used to ensure that the correct comparisons are achieved. The results are represented cooperative by cooperative and then cross-data tabulations were used to assist in comparing different cooperatives and also arrive at a group average.

4.2 SECTION 1: PERSONAL AND BASIC INFORMATION FOR MEMBER DATA

4.2.1 Sample Size and Gender Distribution

Table 8 shows that in the survey, more women (63%) than men (27%) were represented. From the analysis the WH cooperative had the highest number of women at about 98% with the FN having the least number of women at 34%. In view of this, Project approaches to the activities in cooperatives may be different for different cooperatives as men and women are known to have different interests and training needs.

Table 8: Cooperative Sample Membership and Gender Composition

Name of Cooperative	Gender		Total
	Men	Women	
BANDA	20	20	40
CYAMUDONGO	10	25	35
FRIENDS OF NYUNGWE	25	13	38
NYUNGWE NZIZA COOPERATIVE	10	14	24
WOMEN HANDICRAFT COOPERATIVE	1	39	40
Total	66	111	177

4.2.2 Sample Age Distribution

Tables 9 and 10 give the age of most of the respondents, 67% of whom are aged between 15 and 44 years. This is representative of the general country population which is generally young.

Table 9: Age Distribution for Individual Cooperatives

	BN	CY	FN	WN	NN
15-29	53	37	13	0	92
30-44	30	23	29	20	8
45-59	10	37	45	45	0
60-74	8	3	13	35	0

For BN, 53% of the members are aged between 15 and 29 with a good spread of members in other age groups as follows: 30% are aged between 30 and 44, 10% are aged between 45 and 59 and 8% between 60 and 74 years. The CY cooperative has the most even spread in terms of age sets with 37% aged between 15 and 29, 23% aged between 30 and 44, 37% aged between 45 and 59 and only 3 % aged between 60 and 74.

For FN, the majority of members (45%) are aged between 45 and 59 followed by those aged between 30 and 44 (29%) and 13% for members aged between 15 and 29, while those aged 60 to 74 represent 13.2%. For the WH, the majority of the members are in the age bracket of 45-59 (45%) followed by those aged 60- 74 (35%) and those aged between 30 and 44 (20%). It is important to note that this cooperative does not have members aged below 29 years and has the highest number of members aged between 60 and 74 years amongst all the cooperatives.

The NN cooperative group is rather a young one with 92% of members aged between 15 and 29 and only 8% aged between 30 and 44.

Table 10: Age Distribution for all Cooperatives:

Age bracket of Respondents	Frequency	Percent
15-29	69	38.2
30-44	52	28.9
45-59	50	27.8
60-74	9	5.0

4.2.3 Highest Education Levels

Table 11 results shows that that the highest level of education attained by respondents is primary education level with 61% of respondents. Over 50% of all the respondents in the cooperatives have primary education level. NN has the least number of members who have not gone to school (4%) but also the highest number of members with a primary school certificate (79%). CY has a wide spread of various qualifications with 51% having primary education, 6% secondary education and 9% with certificate/diploma level education.

The FN and WH cooperatives have an equal representation of members who have attained primary and secondary school education at 50% and 13% respectively. Both cooperatives also have the highest number of members who have not gone to school at 33% each. According to the RHDS 2005 in Rwanda, average percent of men and women who have never attended school stood at 22% and 29% respectively i.e., an average of 25.5 % of the population then had no education. The results of 2007/08 RHDS also clearly showed that women who have not gone to school at ages 30–49 vary from 20–50% compared to men who vary from 16-27%.

This is further supported by the national employment policy which notes that according to estimates, almost 37.50% of the population has never been to school, 55.56% received primary school education, 2.03% have post primary level of education, 4.40% have secondary school education and about 0.51% have university education.

Table 11: Highest Level of Academic Education

Cooperative	CY	BN	FN	WK	NN
Education level	%	%	%	%	%
Not gone to school	11	13	33	33	4
Primary School	51	65	50	50	79
Secondary School	6	15	13	13	0
Certificate/Diploma	9	0	0	0	0
Undergraduate degree	0	3	0	0	0
Others	0	0	0	0	13

4.2.4 Marital Status

Survey results on marital status presented in Table 12 show that the majority of the respondents are married (72%). The FN cooperative had the highest number of married members (92%) followed by WH (83%) and together with WH they have the least number of singles at 3% each. BN has a good mix of married and singles at 65% and 25% respectively.

NN has the highest number of singles which can well be related to the age of the majority of the members of the cooperative (15-29 years). The percentage of single persons at NN stands at 50 % which is equal to the number of those who are married i.e., 50%.

Table 12: Marital Status

Cooperative	Overall	BN	CY	FN	WH	NN
Status		Percent	Percent	Percent	Percent	Percent
Married	71.7	65	57	92	83	50
Single	20.0	25	37	3	3	50
Divorced	3.9	5	3	0	8	0
Widowed	3.9	3	3	5	8	0

4.2.5 Number of Dependants

Table 13 shows the number of dependants per member in all the cooperatives. BN and CY have 25% and 23% respectively of members that have no dependants. (Dependants in this survey were inclusive of persons assisted by or under the care of the respondent who may

not necessarily be the respondents own children). BN has a spread of between one to fifteen dependants with an average of 3 dependants per family.

CY has a spread of 57% of the members having one to seven dependants with a majority of members (28%) having between 6 and 7 dependants, while the average number of dependants for CY is four. For FN, the majority of the spread is between 1 to 7 dependants which accounts for 79%. Those with 2 to 3 dependants are the majority at 34% while the average number of dependants for FN members is 5. WH has 78% of its members having between 1 to 8 dependants with the majority having at least four dependants. The average number of dependants for this cooperative's members is 4. Studies by Plumptre, A. J. et al (2004)¹ showed that the average household numbers in the Nyungwe forest area was at 5.85 persons per household.

Table 13: Percentage Number of Dependants

No of dependants	% for dependants			
	BN	CY	FN	WH
0	25	22.9	0	2.5
1	5	8.6	5.3	5
2	5	5.7	18.4	12.5
3	20	2.9	15.8	10
4	12.5	5.7	13.2	17.5
5	15	5.7	13.2	12.5
6	10	14.3	10.5	7.5
7	2.5	14.3	2.6	12.5
8	2.5	5.7	0	10
10	0	0	2.6	5
11	0	2.9	5.3	0
15	2.5	0	0	0

The range of the dependants is within the limits of the national range which was recorded in 2007/08 RHDS study that showed that half of all households in Rwanda have 3 to 5 people with a mean size of a Rwandan household being 4.3 persons, with the rural population having an average of 4.5 members per household. The average number of dependants for the five cooperatives is 4 as shown in Table 14.

¹ The Socio-economic Status of People Living Near Protected Areas in the Central Albertine Rift

Table 14: Average Number of Dependants

Name of Cooperative	No of dependants
BN	3
CY	4
FN	5
WH	5
NN	3

4.2.6 Type of Occupation

Rwanda is a country whose economy is mainly agricultural-based, thus the main occupation for the vast majority of the population is farming, although the challenge is that this is undertaken at subsistence levels. This was also found to be true for this survey.

Though a number of respondents have two activities (farming, weaving and/or teaching) the major basic occupation is farming/agriculture. Table 15 shows that farming/agriculture is the major occupational activity for four cooperative (FN, BN, CY and NN) members with only WH identifying handicraft making as their main occupational activity. CY had 91% responding to the fact that they are farmers and 80% and 74% of the BN and FN members responded to the same respectively. For WH - most likely due the nature of the cooperative - most of the women (73%) responded to being handicraft artisans and their main occupation as being weaving. It is interesting to note that 13% of BN members are teachers. According to a survey conducted in 2006 by the National Institute of Statistics of Rwanda (NISR), 87% of the Rwandan population is engaged in agriculture, mainly for household subsistence.

Additionally, the National Employment Policy indicates that the working population of rural Rwanda is characterized by an abundant, but inadequately trained labor force that has varying education levels as indicated above. It is also important to note that the Rwandan economy is dominated by agricultural activities and 90% of the population is based in rural areas. The policy further shows that amongst this population, the self-employed stand at 76.81% and family helpers at 15.22% both representing almost 92.03%. These are mainly in the agricultural and livestock sectors (about 87.63%) with often no skills and education. The Policy concludes that this is a result of an under developed economic structure dominated by primary and subsistence production mainly in the informal sector with low productivity and added value.

Table 15: Occupation of Respondents

Occupation	All Coops	WH	FN	BN	CY	NN
	Percent	Percent	Percent	Percent	Percent	Percent
Farmer	70	25	74	80	91	88.2
Teacher	4.4	3	0	13	3	5.9
Handicraft Artisan	16.1	72	0	0	3	0
Businessman	1.7	0	3	0	3	5.9
Other	7.2	0	23	7	0	0

4.3 SECTION TWO: HOUSEHOLD DATA

4.3.1 Land ownership

Tables 16 and 17 show the number of members who own land and the type of land ownership document that they possess. The survey results indicate that about 82% of all the cooperative members who responded own land and only 18% indicated that they do not own any land. This is a good indication that if assistance were to be given in relation to development of land, it might very well have a positive impact to the cooperative members and their immediate beneficiaries.

The results show that there is a valid ownership level amongst the cooperative member with FN having the highest level of land ownership at 95%, followed by WH at 93%, and with the NN having the least land ownership at 54%. Age could be a major contributing factor to this spread where NN with the youngest population, has the least level of land ownership and other cooperatives with relatively older persons have a higher level of land ownership.

Table 16: Land Ownership

	Frequency (No of respondents)	Percent representation of the respondents	Valid Percent
Yes	145	80.6	82.4
No	31	17.2	17.6
Total	176	97.8	100.0

Table 17: Percentage of Land Ownership by Cooperative

	BN	CY	NN	WH	FN
	Percent	Percent	Percent	Percent	Percent
Yes	80	69	54	93	95
No	10	31	46	8	5

4.3.2 Livestock Ownership

The study asked the respondents to indicate what type of animal they owned and also how many of each type. This dimension of livestock ownership was introduced as livestock ownership is a good measure of wealth. The respondents with higher wealth generally tend to own a higher number of livestock. Overall, the dominant animal that is owned by most members is pigs with a total of 38% of the respondents having reared one, followed by goats at 35.3%, and with cows taking the third position at 31%. The least reared animal is sheep with only 7.8%.

NN with the youngest population has the highest number of pigs kept 71%, while BN had the lowest number, 8%. MINAGRI records indicate that the Nyamagabe area (former Gikongoro Province) has a record of the highest pig population in the country at 21% (43,295 animals) of the total pig population in the country as of the 2003 animal census. Plumptre, et al. had also shown in an earlier survey that pigs tended to be raised in Gikongoro District, East of Nyungwe, a pattern that was also found by Olson (1994) for Rwanda, confirming the reliability of these results.

Most of the respondents indicated that the animals that they keep were not for commercial purposes but for subsistence farming as evidenced by the responses (Commercial 3.9%, Subsistence 58%).

Table 18: Percentage Livestock Ownership

Cooperative and Type of animal	Cows		Goats		Pigs		Chicken		Rabbits		Sheep	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
BN	25	75	18	82	8	92	15	85	5	95	10	90
CY	34	66	29	71	31	69	26	74	6	94	0	100
FN	34	66	40	60	50	59	26	74	18	82	13	87
WH	23	78	45	55	40	60	13	88	18	82	8	92
NN	33	67	46	54	71	29	0	100	8	92	0	100

There seems to be a correlation between the age of the cooperative member and the type of animal reared by the members. Where the age of the members is on the lower side, the pig is more predominant as compared to the cow. This could be because the pig requires less work in terms of rearing it in comparison with the cow.

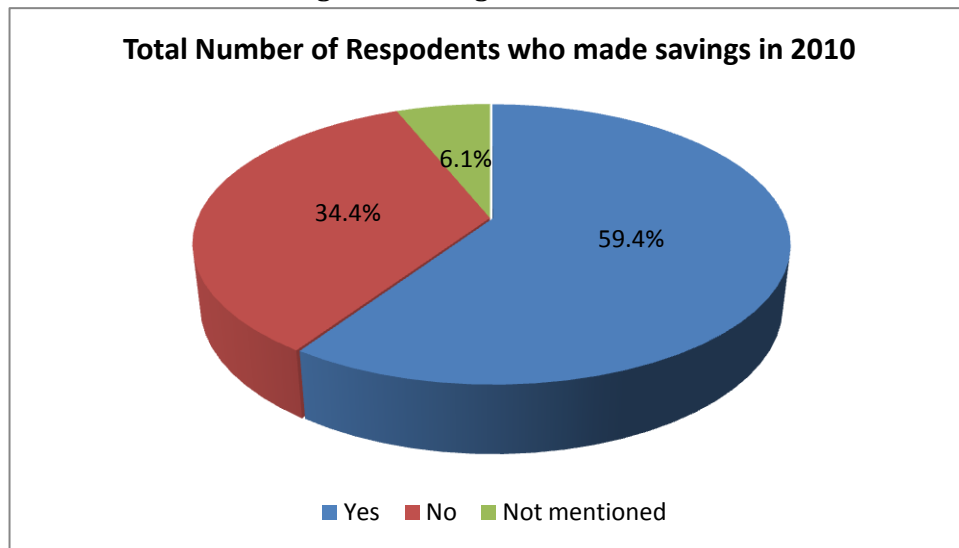
4.3.4 Household Saving and Borrowing

4.3.4.1 Household saving

The aim of collecting this data was to assist CSD to understand the saving and borrowing habits of the respondents (cooperatives members). One of the key functions of fully mature cooperatives is to assist its members in improving their income levels as it acts as the saving and borrowing avenues for members' needs, thus providing an opportunity for growth and improvement. The results show that trends of saving and borrowings are low for all the cooperatives.

The results presented in Figure 3 show that 59% (107 respondents) made some savings in the year 2010, with another 34% indicating that they did not make any savings. It has been documented in many publications that the savings culture in Rwanda is not impressive, key amongst them being the Umurenge Sacco Strategy (2009) developed by MINECOFIN. These results echo the same sentiments. The lack therefore of a saving culture has been noted to be one of the key reasons as to why the government is trying to boost the saving culture in the country through the establishment of the Umurenge SACCO strategy.

Figure 3: Savings Levels in 2010



The respondents were further asked to indicate the amount of money they had saved and where (or the way they made) their savings. The results presented in Table 19 show that the main method/form of saving is through the bank where the average savings for all respondents was around Rwf 27,390 per year. The results further indicate that BN has the best saving culture with an average saving of Rwf 51,883 per year compared to WH with the least savings amounting to Rwf 2,102 per year. This could be related to the income levels and also the exposure levels of the members amongst other issues. Results also show that the preferred mode of saving are banks followed by land and then cooperatives.

Table 19: Type and Amount of Savings

Cooperative/ Where saved	BN	CY	FN	WH	NN	Average
	Rwf	Rwf	Rwf	Rwf	Rwf	Rwf
Cash / Bank Deposit	62,090	43,323	28,350	3,185	18500	31,090
Cooperative savings	6,250	9,943	0	2,850	16800	7,169
Purchase of livestock	25,310	2,791	0	0	3600	6,340
Purchase of agricultural land	43,250	714	0	0	5000	9,793
Purchase of house/flat/plot	18,750	0	0	0	0	3,750
Average	51,883	18,924	9,450	2,012	14,633	

4.3.4.2 Household Borrowing

Related to savings are borrowings where 26% (47 respondents from all cooperatives), borrowed money in the same year (2010) with 72% not borrowing any money at all (Figures 4 and 5). This could be related to low incomes levels in the rural areas or the fact that the culture of borrowing and saving has not been entrenched in cooperatives members. The fact that most of the cooperatives were initially social associations where members joined for social activities/reasons rather than for commercial reasons could also be a major factor. Again, this is a major opportunity for the Nyungwe Nziza Project to make some intervention where they could help in raising awareness to improve the saving and borrowing cultures amongst the members.

For members from various cooperatives who borrowed funds, the money they borrowed was used for the following activities: agriculture and animal husbandry, building a house, business household issues, purchase of land/plot, weddings and school fees.

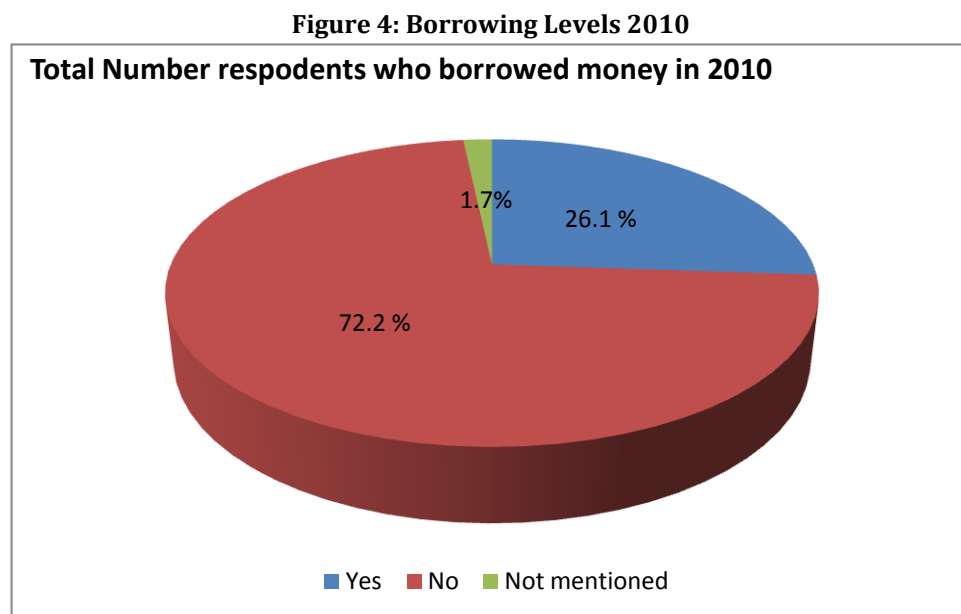


Figure 5: Savings and Borrowing Trends in Different Cooperatives

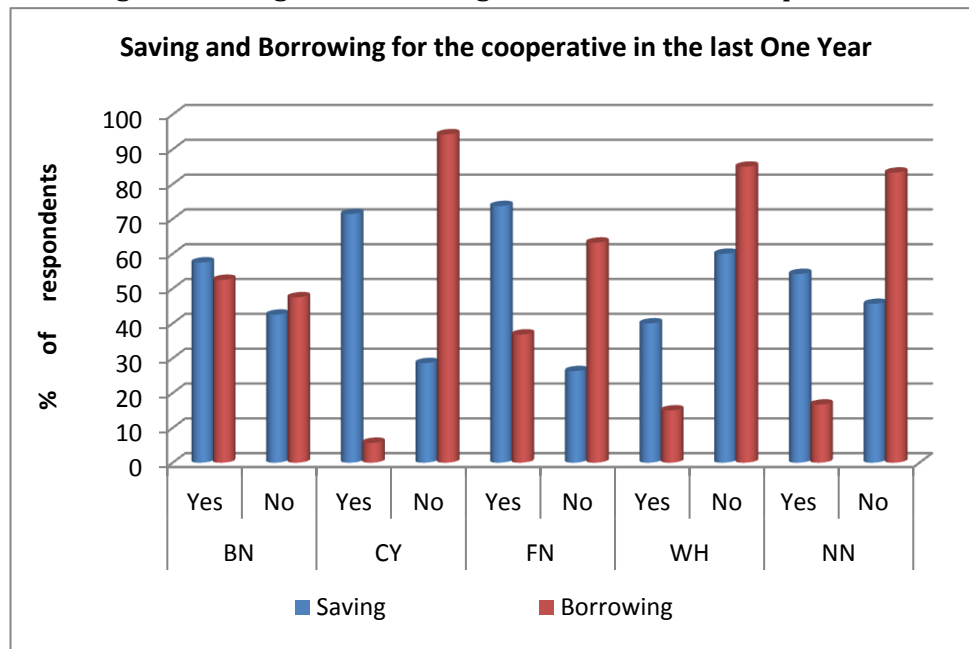


Table 20 shows the trend of saving, borrowing, lending and remittance receipts for all the cooperatives. Two cooperative - CY and FN - show a very strong saving trend with 72% and 74% respectively of the members having made some savings. In terms of borrowing, members from CY showed the least borrowing trend at 5.7%, with BN showing a similar trend both on borrowing and as saving at 52.5% and 57.5% respectively.

Table 20: Trends in Savings, Borrowing, Lending and Remittances

Cooperative Name	Response	% response			
		Saving	Borrowing	Lending	Remittance
BN	Yes	57.5	52.5	35	0
	No	15	42.5	45	100
	NM	27.5	5	20	0
CY	Yes	71.4	5.7	20	5.7
	No	28.6	94.3	80	94.3
	NM	0	0	0	0
FN	Yes	73.7	36.8	2.6	0
	No	26.3	63.2	97.4	100
	NM	0	0	0	0
WH	Yes	40	15	12.5	0
	No	60	82.5	85	100
	NM	0	2.5	2.5	0
NN	Yes	54.2	16.7	33.3	0

Cooperative Name	Response	% response			
		Saving	Borrowing	Lending	Remittance
	No	45.6	83.3	66.7	0

4.3.5 Ownership of Physical Assets

It is difficult to measure wealth in a society that primarily depends on subsistence farming. One way that the survey and this report attempted to address this issue was to collect information on the property and physical assets amongst other surrogate indicators of wealth (livestock ownership, type of houses, etc.). These were considered to be an indicator of wealth or better source of income for the members of the cooperatives. The assets that were looked at include the ownership of a mobile phone, radio, television, bicycle, motorbike, car and a house.

4.3.5.1 Durable Goods Ownership

Table 21 shows the ownership of assets that could be considered indicators of wealth or means of improving the efficiency of livelihoods. The most common item owned in households was a mobile phone (56.4%). Ownership of the mobile phone was highest at BN at 65% and lowest at CY at 49 %. The national studies in 2005 had indicated that in rural areas, these goods (mobile phones and televisions) were more or less nonexistent. The subsequent RHDS study of 2007/08 showed that the ownership of mobile phones had risen from 5 percent, to 13 percent in the country.

The most popular media item was the transistor radio with 66.72% owning one but only 2.2% of the respondents owned a TV across all the cooperatives. The national average radio ownership according to the RHDS survey in 2007/8 was (58.1%), and overall, the radio was the most frequently owned durable item. FN had the highest percentage of members owning a radio at 84%, with CY having the least number of members who own a radio at 49%.

The most common transport asset owned was a bicycle at an average of 13.8% which is just slightly above the national average of 12.2 % as found in the RHDS study. There was 1.52% ownership of motorcycles compared to 0.6 % national average ownership and 1% ownership of cars or pickup trucks compared to 0.8 % national average as per the RHDS studies of 2007/8.

Studies by Plumptre et al. in 2004 showed that in the Nyungwe forest area, 46.92%, 3.22% and 1.00% owned a radio, bicycle or motorbike respectively. The current survey indicates an upward change in the ownership of the radio and the bicycle with the ownership of the motor bike remaining relatively the same.

Most of the cooperative members do own a house (75.5%) and this could well be related with the land ownership by most members of the cooperatives which as noted above, stands at an average 78.2 %. Again it was noted that NN had the least number of members who own a house at 50 percent and this could be related to their age since most of them are on the lower age bracket and still single.

Table 21: Asset/Durable Goods Ownership

Item /Cooperative		BN	CY	FN	WH	NN
Bicycle	Yes	5	3	21	15	25
	No	95	97	79	85	75
Motorcycle	Yes	5	0	3	0	0
	No	95	100	97	100	100
Car	Yes	2	0	3	0	0
	No	98	100	97	100	100
House /Plot	Yes	80	63	90	95	50
	No	20	37	11	5	50
Radio	Yes	75	49	84	68	58
	No	25	51	16	32	42
TV	Yes	0	3	8	0	0
	No	100	97	92	100	100
Mobile Phone	Yes	65	49	63	55	50
	No	35	51	37	45	50

4.3.5.2 House Type and Construction

The type of a house owned by an individual is another indicator of wealth in addition to what has been discussed under 4.3.5 and 4.3.5.2 above. Taking into account that 75.5% of cooperative members do have their own houses, it was important to study and analyze their construction and structures. In this case, CSD considered the main materials used for wall, roof construction and the floor material (the former two are the principal components of a house, representing the greatest expenditure on materials, while the floor material is optional depending on the amount of money one has to spare). As such, they can be a good

indicator of a household's wealth, assuming that wealthier households are prepared to invest in construction of homes with more durable and higher cost materials.

Table 22 shows that 62.2 % of all the respondents indicated that they had an earth floor for their houses while 15.6% had a cemented floor. The most common form of wall construction was mud plaster on timber poles for 40 % of the respondents, with those using concrete fire brick (which would be the most expensive) constituting 29%. 49% of the houses are roofed using fired tiles and 30% are roofed with irons sheets. With the new move to eradicate the grass thatched roofing by the government there were no indications of the same though some of the respondents were non committal on what they have used for construction of their houses.

There is a varying trend between the various cooperatives with BN having the highest number of houses which are roofed with fire brick tiles (42.5%) and also have concrete brick walls (58.3%) but only 50% have earth floors. In all the cooperatives, the results show that the floor of the houses is made up of mud at 62.16% compared to the national average of 84.4 %. It's important to note that the information on the floor is important because flooring material used in dwellings is not only an indicator of household wealth status, but also an indicator of the quality of the health environment in which the household lives because certain rudimentary materials like earth, sand, and cow dung are propagation vectors for disease causing parasites and germs. These rudimentary materials are, in addition, a source of dust and also difficult to clean (RHDS 2007/08).

FN has the highest number of houses with cemented floors (34.2%) that are made of mud walls (78.9%). WH has the highest number of houses that are roofed with clay brick tiles (63.2%). These variations could be an indication of the wealthiest members in the different cooperatives and also local availability of the construction materials.

Plumptre et al. (2004) found that houses in Rwanda had predominantly wall structures that were made of mud although brick was used more frequently. The predominant roof material was metal sheeting, although tiles were used more particularly around Nyungwe and our survey reconfirms the same.

The study by Plumptre et al. (2004) showed that those houses whose walls were constructed of mud were 67.45 % (compared to the results of our survey where they stand at 40.18%), the percentage of timber walled houses was 5.36 % (compared to our survey's 7.84%) and those with brick walls were at 25.46% (compared to our findings at 29.54%). In the same study, iron sheet and tiled roofed houses stood at 35.69% and 47.50%

respectively, compared to the survey results of 29.54% and 45.86%. This shows some slight changes that are an indication of better conditions of living now compared to 2004.

Table 22: Type of Building Materials Used for House Construction

		NN	FN	CY	BN	WH	Average
House Section/Area	Material	Percent	Percent	Percent	Percent	Percent	Percent
Floor	Cemented	4.2	34.2	17.1	7.5	10	14.6
	Earth	66.7	60.5	48.6	50	85	62.16
Wall	Timber	4.2	2.6	25.7	4.2	2.5	7.84
	Mud	4.2	78.9	28.6	4.2	85	40.18
	Concrete bricks	58.3	13.2	8.6	58.3	7.5	29.18
Roof	Corrugated iron sheets	16.7	34.2	54.3	27.5	15	29.54
	Tiles	50	63.2	8.6	42.5	80	48.86

4.3.6 Household Income and Expenditure Analysis

4.3.6.1 Household Income

The household income was analyzed from getting a subtotal of all of the following incomes in one year:

- Income from agriculture and allied activities.
- Income from trade/business/ small shops.
- Income from self employment
- Salary income (of all the household members who have salaried income).
- Income from rent, interest, dividends.
- Transfer Income (remittance from household members living in other places).
- Income from cooperative Activities.

Table 23 shows that the total income for the various members of different cooperatives varies between Rwf 110,191 and Rwf 379,342 annually (US\$184 - \$632). The national income per capita is estimated to be US\$ 500. The results show that three of the cooperatives - BN, FN and WH - have incomes that are above the national per capita

income, but two cooperatives CY and NN are below this. However it was found that three cooperatives namely FN, WH and NN did not derive any income from cooperative activities. BN cooperative has the highest number of income activities and WH has the least. Again, the dominant source of income is from agricultural activities which represent the main source of income. And knowing that this is rural area in a country where agriculture comprises 44 percent of GDP, the highest incomes would definitely come from agriculture.

Table 23: Sources of Income and Annual Income Levels for Cooperative Members

Source of Income	Average per source	BN	CY	FN	WH	NN
Farming Activities	95,128	136,058	18,166	2,632	237,825	80,958
Livestock, Pigs ,Goats , Poultry etc	19,440	1,375	11,149	45,553	21,500	17,625
Trade/Business/ Petty Shops	66,184	23,000	3714	233,263	51,650	19,292
Self employment like Artisan	40,908	12,900	22720	73,421	55,250	40,250
Salary income	43,979	141,425	45,914	24,474	0	8,083
Rent, Interest, Dividends.	13,140	75	0	0	0	65,625
Transfer Income	629	0	3143	0	0	0
Cooperative Activities	5,584	22,538	5385	0	0	0
Total	284,992	337370	110191	379342	366225	231833
Average per cooperative	35,624	42,171	13,774	47,418	45,778	28,979

Table 24 shows that in terms of individual cooperatives, 56.7% of the members earn below Rwf 30,000 per month (US \$50), 80% of the members of CY earn below Rwf 30,000 per month which is a total contrast with a FN where 30% of the members earn over Rwf 30,000 per month.

As shown in Table 25 and 26, the majority of the cooperative members (37.8%) have an income level of between Rwf 10,000 and Rwf 30,000 (US\$ 16–50 per month). It is important though to note that most cooperative members in the survey derive their income from subsistence farming, and to some degree, the key constituent of the members income was income from agriculture (farming and livestock rearing) which are undertaken both for consumption at home and for sale.

Table 24: Monthly Income Levels for all Cooperatives

Monthly income levels	Frequency	Percent
< Rwf 10,000	34	18.9
Rwf 10,000 –Rwf 30,000	68	37.8
Rwf 30,000 – Rwf 60,000	48	26.7
Rwf 60,000 – Rwf 100,000	14	7.8
>Rwf 100,000	16	8.9

Table 25: Monthly Income Levels for Individual Cooperatives

Monthly Income in Rwf	BN	CY	FN	WH	NN
< 10000	0	54.3	5.3	0	50
10,000 – 30,000	47.5	25.7	15.8	65	33.3
30,000 – 60,000	35	8.6	42.1	25	16.7
60,000 – 100,000	7.5	0	15.8	7.5	0
> 100,000	10	8.6	21.1	2.5	0
Not mentioned	0	2.9	0	0	0

The variation in the income levels could be explained by the fact that in some cooperatives, members participate in other alternative income generating activities as shown in Table 26. Where the income levels are low (e.g., CY and NN), cooperative members have no other income generating activities apart from what they earn from their farming and cooperative activities.

Table 26: Participation of Cooperative Members in other Income Activities

	FN	NN	BN	CY	WH
Yes	41.5	8.4	40	2.9	22.5
No	56.1	91.7	47.5	97.1	77.5
NM	2.6	0	12.5	0	0

In view of the above, some of the income generating activities that members of cooperatives are engaged in include the following: cleaning, making charcoal, making sorghum beer, tailoring, making bricks, small scale business, mechanics, night watching, making timber, making radial terraces, crafts, carpentry.

4.3.6.2 Household Expenditure

The pattern of expenditure is closely related with the spender's wealth. In this area we covered three critical items namely:

- Expenditure on food items in the last month.
- Expenditure on non food items in the last month.
- Expenditure on other non food items on annual basis.

The results - presented in Table 27 - show that, the average expenditure on food items per month averages Rwf 2,742. FN members have the highest expenditure on food items at Rwf 3,857 per month while BN and NN have the lowest expenditure at Rwf 2,629 per month. These figures, as explained below, indicate that all the cooperatives surveyed could be categorized to be in the under extreme poverty line classification. SIDA (2008)² studies show that for Western and Southern Province, the percent of the population below the extreme poverty line is 45.9 % and 41.8 % respectively.

SIDA (2008)³ further notes that the Rwanda government poverty measures give a threshold level of consumption, constructed using a cost of basic needs method, below which individuals are considered to be poor. For the standard poverty line, it considers the cost of buying food commodities sufficient to provide 2,500 calories per adult per day, and basic non-food requirements. In addition, an extreme poverty line is constructed representing the level of expenditure needed to be able to purchase the basic food basket only. In 2006 prices, the standard poverty line translates into Rwf 250 per adult per day (approximately US \$0.50), and the extreme poverty line to Rwf 175 (roughly US \$0.35). In this study, the average amount of money used for food purchase per day is Rwf 91.

² Growth and Poverty in Rwanda: Evaluating the EDPRS 2008–2012

³ Growth and Poverty in Rwanda: Evaluating the EDPRS 2008–2012

Table 27: Expenditures on Food Items during the Last Month (July 2011)

Food Item	Average cost in per month Rwf for the Five Cooperatives	BN	CY	FN	WH	NN
Cereals	6,001	2,533	9,343	9,016	5,418	2,533
Pulses	5,192	3,711	6,150	6,889	5,283	3,711
Edible oil	2,503	2,289	3,526	3,374	1,863	2,289
Milk and milk products	977	120	2,163	2,029	198	120
Sugar	1,243	1,188	2,314	1,550	395	1,188
Beverages (Tea, Coffee etc)	1,171	2,051	1,771	795	135	2,051
Vegetables and Fruits	2,732	2,810	3,289	2,708	1,818	2,810
Meat, Fish and Eggs	2,258	3,050	2,816	3,000	750	3,050
Processed food	1,033	858	514	1,605	1,018	858
Other food items	4,306	7,680	289	7,605	2,771	7,680
Average Expenditure	2,742	2,629	3,217	3,857	1,965	2,629

Table 28 shows the monthly expenditure on non food items which averages Rwf 2,680 for all the five participating cooperatives in the study. The aim of this survey question was to narrow down as to what some of the main expenditures that the cooperative members currently have. FN once again has the highest expenditure on non food items at Rwf 4,218 per month compared to NN at Rwf 1,446 per month. The highest consumer of non food items is entertainment at an average of Rwf 6,042 per month followed by transport at Rwf 5,492 and the least expenditure item is on security at Rwf 122 monthly. It is supposed that since the cooperatives are all rural-based they do grow most of their food items or even if they do not, they do get their food items cheaply which leads to low expenditure on food items. However, it should be noted that the expenditures in Table 27 covered the previous month prior to the survey (July 2011) which could have been peculiar compared to the others since as noted on the comments globally, there is still a high expenditure on the food items as shown on table 29.

Additionally, it should be noted that entertainment expenditures included all social activities such as weddings that could not be categorized specifically under the other headings. However, these activities all require money and as indicated, are higher than any other expenditure. Finally, these results could be a good pointer to the project in that one of the key areas of intervention could be education to members to save more money rather than spend it on social activities. This could be one of the key result areas of assessment of the impacts of the project intervention.

Table 28: Expenditures on non-Food Items Last Month (July 2011) in RWF

Item	Average Cost per Month for the Five Cooperatives	BN	CY	FN	WH	NN
Fuel (kerosene, firewood etc.)	1,844	4508	2517	988	323	333
Electricity(cash power)	514	36	477	1,329	471	146
Security	122	28	20	466	58	0
Transport	5,492	4,295	4,891	1,043	3,589	2,913
Entertainment (social activities)	6,042	7,030	2,594	10,250	5438	2,167
Telephone	2,759	4,020	1,649	4,179	1610	1,838
Toilet articles	1,987	2,733	2,523	1,474	815	2,729
Average	2,680	2,680	2,096	4,218	1,758	1,446

Table 29 shows the results of annual expenditure on non food items where on average, members spend Rwf 20,723 per year. Education constitutes the highest expenditure for all the members of the five cooperatives with an average annual expenditure of Rwf 51,343. FN has the highest annual expenditure on education at Rwf 115,553 and NN has the least expenditure at Rwf 333. On average, the highest spenders on non food items are FN at Rwf 44,251 and the least spenders are NN spending Rwf 8,458.

Table 29: Annual Expenditure on non-Food Items

Items / Cooperatives	Average Expenditure in Rwf	BN	CY	FN	WH	NN
Clothing	24,063	21,813	21,934	40,982	20,288	15,300
Footwear	11,208	8,800	10089	20,492	7,886	8,771
Durable goods	7,232	4,600	8917	12,447	513	9,683
Education of Children	51,343	41,516	29,744	115,553	69,588	313
Medical	6,619	4,663	6,206	9,766	8,559	3,902
Travel	21,123	38,425	7,171	50,495	4,770	4,754
Repairs and maintenance	17,334	8075	23,497	45,838	425	8,838
Other major expenditure (social event, weddings etc)	26,861	21,383	33,266	58,432	5,125	16,100
Average Expenditure	20,723	18,659	17,603	44,251	14,644	8,458

Table 30 (an aggregated summary of expenditures) shows that globally, the highest monthly expenditure goes to food items. The average for the five cooperatives is Rwf 25,183 per month. BN has the highest consumption levels in all the four summary items that were reviewed. In education expenditure, the average expenses are Rwf 45,728 and the NN has the lowest at Rwf 250. BN again exhibits a high expenditure at an average of Rwf 45,951 per month on utilities in comparison with the other cooperatives where WH shows the least expenditure in terms of utilities at Rwf 3,523 per month

This high consumption level of BN members could be attributed to its location, the education level, and higher income levels amongst other reasons. NN has a relatively young population, which could mean that the members may not be independent from their parents financially and this could lead to the low expenditure on food items. In addition to this, BN as a cooperative made some profits consistently for the last three years and part of the profits are shared by members. BN members therefore have more income from the cooperative and other sources in comparison to the other cooperatives which have nothing to share.

Table 30: Summary of Major Monthly Expenditure Costs

Expense	Average for the five cooperatives	BN	CY	FN	WH	NN
Educational expenses	14,120	45,728	4,499	10,927	9,197	250
Insurance expenses	2,864	6,328	4,215	1,642	1,987	146
Utilities cost expenses	16,741	45,951	17,519	8,934	3,523	7,779
Food items	25,183	28,952	28,636	37,870	20,600	9,859

Table 31 shows that 89.4% of the respondents have healthcare insurance. This high percentage could be attributed to the fact that it is a requirement by the government combined with the fact that the population places a high value on medical expenses for family members. This is above the overall 68% of Rwandan households that had a health insurance during the 2007/08 RHDS. In 2007/8 the households in Southern and Western province with a healthcare insurance cover from the government Scheme were 58% and 76% respectively.

Table 31: Availability for Mutuelle Medical Insurance for Family Members

	Frequency	Percent	Valid Percent
Yes	161	89.4	92.5
No	13	7.2	7.5
Total	174	96.7	100.0

4.4 SECTION THREE: SPATIAL DATA

4.4.1 Land

Table 32 shows that 81% own the land where they live. Only a small percentage - 2.2 % of the respondents - indicated that they lease the land where they live. The EICV EDPRS (2007) report shows that more than 90% of all Rwandans live in households that own some farming land. This is also true in the current EBS survey, and among those that cultivate crops only 2% do not own any land. However, it's also important to note that the land that they own is not adequate for their needs (Table 33).

Table 32: Form of Land Ownership

Land Ownership	Frequency	Percent	Valid percent
Own	146	81.1	97.3
Leased	4	2.2	2.7

Table 33: Adequacy of Land to Family Needs

Land Adequacy	Frequency	Percent
Yes	11	6.1
No	144	79.4

Table 34 shows that the least owned land ownership document is the land title deed at 21.1%. Other documents that show land ownership are more common in the area (51.7%).

Table 34: Land Ownership Document

Ownership Document	Frequency	Percent
Land title	38	21.1
Other document	93	51.7
Not mentioned	9	5.0
Not applicable	40	22.2

4.4.2 Water

The wet, rainy weather of the area around Nyungwe facilitates the presence of a lot of free water sources and also rain water harvesting. As a result, availability of water to cooperative members as noted in this survey is not a challenge. Figure 6 show that 77% of all the cooperative members get their water for free with only 8.3% having to buy it. For those that buy, daily costs ranges from Rwf 100 to Rwf 3,000. RHDS 2007/08 shows that nationally, 32% of households use water obtained from a public tap, 26% use spring water, 18% of draw water from open public wells, while 6% get their water from covered public wells. 14% of homes/households get their drinking water from rivers and streams. This compares well with the results of this study where 77.2% get free water from various water stations, 13.9 % get their water from public wells or rivers, while only 8.3% buy water.

Figure 6: Sources of Water

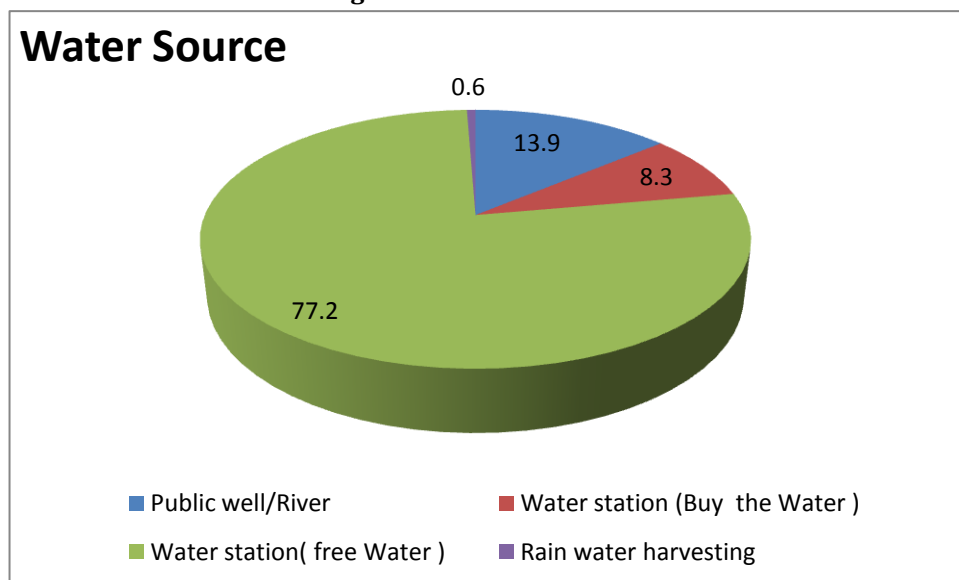


Table 35 shows that the longest distance that members go to fetch for the drinking water is about 4000m. BN and WH are the furthest from the water sources while NN is the closest as shown by the results in Table 35. On average, the distance between the households and the water sources is 742m.

Table 35: Distance Covered to Go to Water Sources

Cooperative	BN	CY	NN	WH	FN
Distance in Meters	Percent	Percent	Percent	Percent	Percent
10	2.5	11.4	0	0	0
20	5	2.9	0	3.6	0
30	7.5	5.7	4.2	0	0
50	2.5	2.9	16.6	0	7.5
100	2.5	2.9	16.7	12.5	7.5
200	10	12.9	4.2	0	20
250	2.5	4.4	12.5	13	22.2
300	15	2.9	4.2	0	1.5
400	2.5	5.7	8.3	4.7	9.6
500	10	2.9	4.2	0	20
600	0	0	12.5	0	6.5
700	5	2.9	8.3	7.8	0
800	2.5	2.9	0	9.4	5.2
900	2.5	0	0	6.5	0
1000	15	0	20.8	20	0
1500	2.5	0	0	2.5	0
2000	10	0	0	17.5	0
4000	2.5	0	0	2.5	0
742					

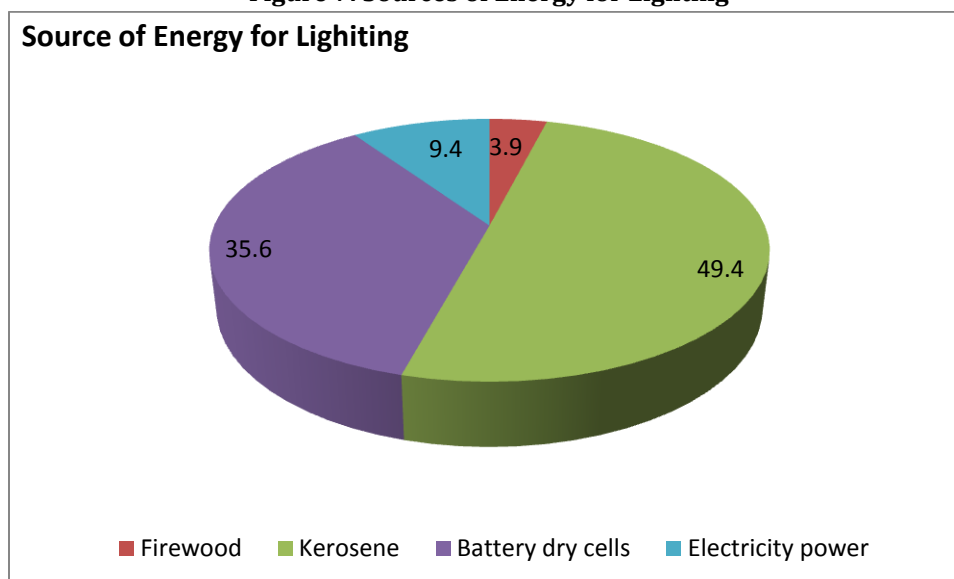
It should be noted that CSD team did not assess the actual quality of water as this activity plus the equipment for testing was not included in the scope of work.

4.4.3 Energy

Figure 7 shows that the main sources of energy are firewood and charcoal for cooking, while kerosene and dry battery cells are used for lighting. The major source of energy for cooking is firewood with 99.6% of the surveyed respondents using this commodity for cooking with 3.9% using firewood for lighting compared to 49.45% and 35.6 % who use kerosene and dry battery cells respectively. Plumptre et al. (2004) also showed that 98.43% of the households in the Nyungwe forest area use firewood as the source of energy for cooking and only 1.14 % used charcoal. Nationally, 95% of the population use firewood as a basic source of energy⁴.

The main source of energy for lighting is kerosene which is used by 49.4% of the cooperative members and dry batteries which are used by 35.6% of the respondents.

Figure 7: Sources of Energy for Lighting



The average monthly cost associated with these utilities is shown in Table 36. The cost of cooking per month is the highest with an average of Rwf 2,767 which could be associated with the purchase of firewood since firewood is not harvested from the forest. The cost of electricity could be attributed to the costs the members pay to recharge their rechargeable torches which they use for lighting.

⁴ NDBP Rwanda Baseline Study Report 2007

Table 36: Utilities

Utility	Cost in Rwf
Water	168
Electricity	867
Cooking	2767

4.5 SECTION FOUR: COOPERATIVES RELATED DATA

In this section, the goal was to obtain data and information on the impact of the cooperative to the members, both now and in the future. In this case we reviewed a number of issues which included membership dates, benefits and aspirations. The aim was to link the role of the cooperative to the members and also the role the member played in making their cooperative better (more responsive to member needs).

4.5.1 Membership Dates

Regarding the dates of setting up of the cooperatives and membership, it should be mentioned that the cooperatives are still in their formative stage. Table 37 shows that the oldest members from the five cooperatives can be traced back to 2003 (1%) while 13% of members just joined this year (2011). For all the cooperatives, the highest increase in membership was noted in 2009 (44%).

Table 37 : Year of Joining the Cooperative

Year of joining	Frequency	Percent
2003	2	1
2005	32	18
2006	2	1
2007	15	8
2008	1	1
2009	79	44
2010	8	4
2011	23	13

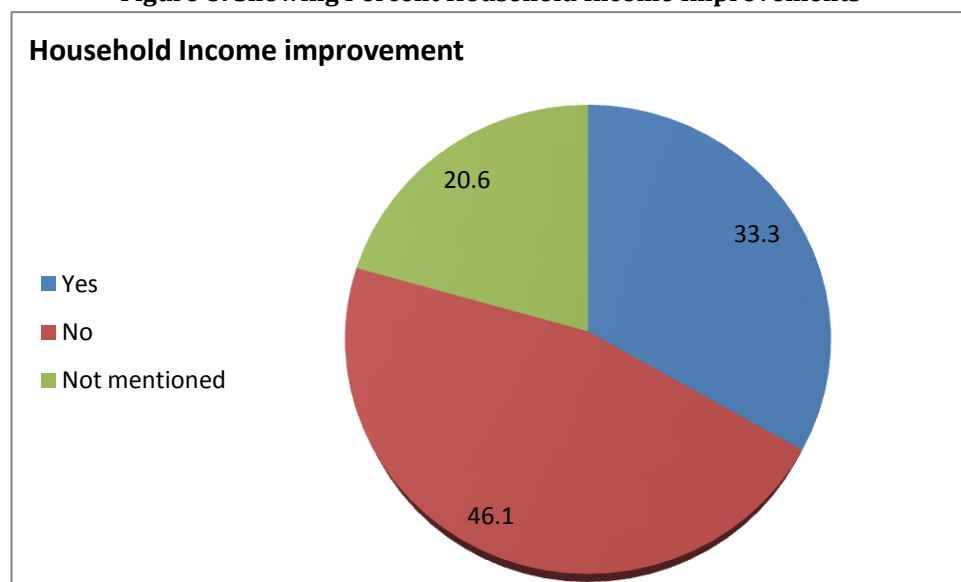
4.5.2 Membership Benefits

The benefits members have accrued from the cooperatives are categorized as social and economic and the results show social benefits are higher than economic ones. Figure 8

clearly indicates that majority of the members (46.1%) feel that their household income has not improved in any way since they joined the cooperative. Only 33.3% feel that their income levels have improved since they joined the cooperative. In spite of this, the respondents indicated that they have had immense social benefits from joining the cooperative which can be listed as follows:

- Building relationship with cooperative members.
- Exchanging knowledge and skills.
- Getting financial aid.
- Good health for their children through learning on various health issues.
- Mutual assistance in times of needs.
- Improvement of welfare.
- Learning to read and write.
- Training on environmental protection.
- Rwandan culture development. (A chance and opportunity to learn cultural dances).
- Education,
- Networking with colleagues and international people and socialization.

Figure 8: Showing Percent Household Income Improvements



In monetary terms, only 44% of members derive income from the cooperative as shown earlier. Those who derived incomes from the cooperative included BN and CY with BN members having the highest income levels from the cooperative which has been profitable. On average for all the cooperatives, the members have paid Rwf 9,425 as the joining fees to the cooperative, though from the review of various cooperatives there does not seem to be

a specific figure members have contributed. At CY, the members on average paid Rwf 6,229 a membership fees.

4.5.3 Members Aspirations

All the respondents indicated that they would like to see their cooperatives develop and become stronger in various areas thus assisting them in improving their welfare. Depending on their activities, different cooperatives had different aspirations. Members aspirations are as follows:

- Getting assistance in certain areas e.g., learning how to read and write, setting out business plans , training in customer care.
- Help in the marketing of the cooperative's goods and services.
- Chances of learning through study tours to other successful cooperatives or enterprises of mutual interest.
- Acquisition of loans though the cooperatives.
- Improving cooperative activities though increased sales of their goods and services.
- Infrastructural assistance through improvement of roads and setting up of permanent offices.
- Assistance to increase and improve the current range of raw materials, machinery and equipments supply.

Figure 9 summarizes these aspirations showing the two most critical needs for the members as training and accessing loans. Figure 7 clearly represents the assistance that members of various cooperatives in general would like to get from the outside world, with training topping the list at 36%, followed by financial assistance at 30%. It would therefore be recommended that further assistance to the cooperative be geared towards training and financial help as per the aspiration of most of the member (66%).

Respondents indicated that they would wish to be trained in several areas including: financial management, project management, cooperative management, environmental protection, business plans development and business management, customer care and basic language skills (especially English so that they can communicate with the tourists visiting the area) and in handicraft making.

Members indicated that they would wish to get financial assistance in the form of loans or grants to undertake some of the following activities: building better homes, paying and

pursuing higher education, purchase of livestock and purchase of tourism related materials.

On the infrastructural requirements, the respondents indicated that they would need assistance to set up a hotel and also in the development of roads. One key issue that was also raised was assistance needed to purchase equipments and machines for the activities of the cooperatives.

Figure 9: Critical Needs and Aspirations of the Cooperatives (%)

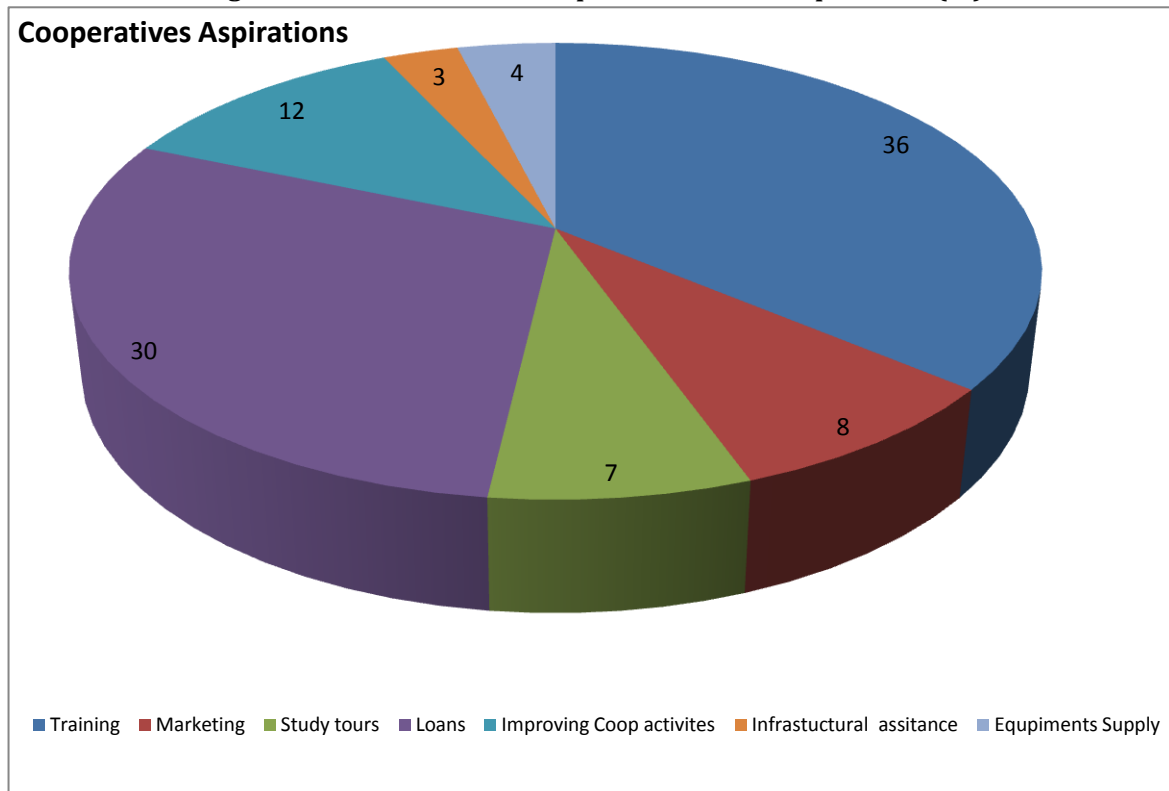


Table 38 gives an assessment of the cooperative leadership by opinion leaders. The cooperative leadership has generally been rated as average. Only the FN leadership has a rating of “very good” and “good”. The leadership of WH has also had good ratings with a mix of “very good” and “good”. The leadership of NN has been rated as fair meaning there could be challenges in the leadership.

Table 38: Rating of the Leadership of the Cooperative by the FGD

Cooperative	BN	CY	FN	NN	WH
Rating	Percent	Percent	Percent	Percent	Percent
Very Good	0	0	50.0	0	12.5
Good	80.0	62.5	50.0	16.7	87.5
Fair	20.0	37.5	0	83.3	0
Poor	0	0	0	0	0

Table 39 indicates the most critical challenges faced by the cooperatives as noted from the responses of the cooperative leaders. It should be noted that there is a lot of similarity between the views (responses) of the leaders and the members as noted below:

- Income for the cooperatives still too low.
- Lack of enough working capital.
- Poor management skills in cooperative management.
- Lack of opportunity to get income from NNP.
- Lack of clear vision.
- Lack of access to the market.
- Challenges of marketing cooperatives products and services.
- Linkage with partners, lack of training, lack of visits at the field to evaluate their activity.
- Lack of modern machines.
- Lack of headquarters/offices where to be permanently stationed.

Table 39: Individual Cooperative Challenges

CY	FN	NN	WH	BN
Lack of material and equipment.	Inequality of intellectual level or capacity.	Low investment capacity	Lack of raw materials.	Bad road from Uwinka-Tyazo
Language barrier to deal with foreign tourists.	Low capital invested	Low income generated.	Low technology in weaving	Low marketing of services
Low income from cooperative activities.	Lack of experience.	Lack of trainings in cooperative management	Lack of trainings in cooperative management	Low capacity of investment in Lodges, restaurant and Bar.
Lack of market for goods and services	Need of capacity building		Need of trainers to weave and Improve weaving.	Low management skills.
Low income generation.	Lack of partners.			Poor Skills in hospitality management
Low skills in cooperative management				Lack of partnership with tour operators
Lack of sponsors				Poor marketing and linkage with other organization.
				Lack of training in cooperative management.

In general, members from the five cooperatives responded that they expect to see their cooperatives growing and becoming bigger and stronger in the next two years. According to their responses, this would be measured by their cooperatives having the following:

- More income generating activities.
- Managing to sell their products.
- Sharing dividends to the members.
- Having their own offices.
- Protecting the environment better than they are doing now.
- Offering employment to the members.,
- Being able to give loans to members.

These are very crucial leads to the needs of the members especially taking into account that Figure 8 in the survey showed that 46.1% of the members indicated that their household income had not improved since joining the cooperative.

The survey showed that the leaders have very specific objectives with regard to the development of cooperatives. These were noted to be in line with the members thinking. In view of the above, the respondents stated the following as the assistance/support they would like to get from the "Nyungwe Nziza" project in relation to their set priorities:

- Training.
- Marketing of products and Services.
- Finance.
- Infrastructural Support.

4.6 LEADER AND FOCUS GROUP

The cooperatives leaders were interviewed in order to get more information on the data relating to some of the challenges mentioned by members (Table 38) and also as a means of verifying some of the statements collected from members. In total, 35 cooperative leaders were interviewed (Table 5).

The non cooperative members were interviewed mainly to get their views on cooperatives as independent respondents for this survey and also assist in verification and validation of some key data collected. A total 31 interviewed leaders included District Cooperative Officers, Executive Secretaries, Social Affair Secretaries, Agronomists, Cell Officers,

Education Officers, Tracker/Research Assistant and RDB Staff (Park Rangers, Guides) amongst others (Table 5).

4.7: GENDER REPRESENTATION

Table 40 shows the gender representation for all the cooperatives surveyed. The results show that globally, there are more women represented (62%) compared to men at 38%. In BN, CY, WH and NN, the highest number of members are women. It is only in FN where there are more men than women.

Table 40: Membership Gender Representation

Gender	Women	Men
BN	28	25
CY	39	11
FN	20	45
WH	55	1
NN	14	10
Total	156	92

Reference is further made to Table 8 above and Table 40 below which shows that in the survey, more women (63%) than men (27%) were represented. As noted earlier, this has a great bearing on the impact to the Project. The high women representation implies that the assistance the project will give to the cooperatives will have a great impact at the grassroots levels.

Table 41: Sample Gender Representation

Gender	Frequency	Percent
Men	69	38.3
Women	111	61.7
Total	180	100.0

The high women representation also means that women's skills need to be developed in their leadership roles as they lead most of the cooperatives. It is also a known fact that women can bring new perspectives to cooperative management, control systems and governance. In Rwanda, the government has been at the forefront of supporting the participation of women in the decision making process and the women in Rwanda also have been in the forefront and have become of driving force of socio-economic

development. The high percentage of women in the cooperatives should help the Project to enhance this and also greatly support the role of the women in furthering these causes .

UNESCO⁵ shows that socio-economic development is used as an entry point for peace building and reconciliation. And that since 1994, women have participated in income generating activities that contributed to building their socio-economic empowerment, which in turn paved the way for sustainable development.

⁵ A paper by *Jeanne IZABILIZA*: The Role Of Women In Reconstruction: Experience Of Rwanda.

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSIONS

The results presented here are a summary of the current economic status of the five targeted cooperatives (Impact Nyungwe Contest winners) surrounding Nyungwe National Park. The results have tried to analyze as much as possible the prevailing economic status among cooperative members and establish baseline qualitative and quantitative data for measuring the socio-economic impact of Nyungwe Nziza's small grants program and related activities.

The parameters used for this study follow the internationally accepted parameters for the studies of this nature. Many more analyses could be undertaken with the data but CSD has tried to limit the analyses to the key issues that can be used in the measurements of the Project impacts, and as detailed in the terms of reference. These results can be used as a baseline for monitoring changes in levels of poverty in the four cooperatives.

The survey shows that there are many common and similar factors and concerns amongst all the cooperatives but there are also specific and peculiar concerns to specific cooperatives. All the cooperatives are in the early formative stages and their management structures are weak. Enhancement of this - especially taking into account that the improvement of basic structures would assist the cooperatives to move to the next stage/level – is a good starting point as the base has been set. And in doing so, it is expected that the income levels of the members would also increase.

The common conclusions derived from the study include the following:

- The cooperatives financial performances are low with a poor culture of saving and borrowing. Major savings for most members are in terms of deposits to the bank and not in the cooperative.
- In all the cooperatives, the majority of the members are married.
- Education levels for most members are up to primary education.
- Income ranges from Rwf 0 to 60,000 per month for the majority of the cooperatives.
- There are varied sources of income with farming, small business and salary being the major sources of income.

- The biggest household expenditures for all the cooperatives are in education for the children. However, fuel, travel and entertainment also take a substantial part of the expenditure for the cooperative members.

5.2 RECOMMENDATIONS

- The cooperatives need to be assisted to become more formalized and move away from the social realms to economic realms as this leads to better incomes for members, as shown by Banda PNPT. They need to redefine their vision and get more focused.
- Assistance rendered to these cooperatives needs to be specifically tailored to reflect the members' diversity in education, age, marital status and gender.
- Members need to be encouraged to save and have a borrowing mechanism at a small fee from the cooperatives. This could be achieved through enhancing the cooperative management and finance structure and through education.
- There is a need to redefine the specific training needs as there are varied requirements within the cooperatives.
- There is a need to improve access to markets and add market value to the cooperative products and goods sold. This would in turn assist them improve on their income levels.

REFERENCES

1. African Development Bank: Country Strategy Paper , Rwanda 2008-2011
2. Ausguideline: Baseline Studies: 2005
3. Butera Jean-Bosco Dr and Rutagwenda Theogen Dr Plan Stratégique de transformation de l'agriculture au Rwanda ; Animal Production Sub-Sector, 2004.
4. EICV Poverty Analysis For Rwanda's Economic Development And Poverty Reduction strategy, 2007
5. Glenn K Bush, Mireille Ikirezi, Giuseppe Daconto Maryke Gray & Katie Fawcett Assessing Impacts from Community Conservation Interventions around Parc National des Volcans, Rwanda 2010
6. Ministry Of Infrastructure: National Domestic Biogas Programme Rwanda, Baseline Study Report 2007
7. National Institute of Statistics of Rwanda: Rwanda Interim Demographic and Health Survey 2007-08: 2009
8. National Institute of Statistics of Rwanda, Rwanda Demographic and Health Survey, 2005
9. Plumptre, A.J., Kayitare, A., Rainer, H., Gray, M., Munanura, I., Barakabuye, N., Asuma, S., Sivha, M., And Namara, A. (2004) The Socio-Economic Status Of People Living Near Protected Areas In The Central Albertine Rift. *Albertine Rift Technical Reports*, 4
10. SIDA Country Economic Report 2008:3 Growth And Poverty In Rwanda: Evaluating The EDPRS 2008–2012
11. Republic of Rwanda: National Employment Policy 2007
12. Republic of Rwanda: Umurenge Saccos Strategy
13. Republic of Rwanda: Poverty Reduction Strategy Paper 2002.
14. UNDP/UNEP: Environment and Poverty Reduction In Rwanda. An Assessment 2006
15. USAID/DAI: Gender Analysis And Mainstreaming 2011
16. UNESCO : THE ROLE OF WOMEN IN RECONSTRUCTION: EXPERIENCE OF RWANDA by Jeanne IZABILIZA

APPENDICES

APPENDIX 1: WORK PLAN

S/N	ACTIVITY DESCRIPTION	TIMELINES
1	Meet DAI Team to agree on technical & financial details	8th July
	Preparation and signing of the contract	13th July
2	DAI to share with CSD relevant documentation by e-mail	13th-15th July
3	CSD to share the draft questionnaire with DAI for approval	14th July
	DAI to share with CSD remarks on the questionnaire	19th July
4	Field assessment trip by CSD & DAI team for activity mapping and meet Cooperatives Officials	20th-22nd July
5	Submit inception report to DAI	27th July
6	Feedback from DAI on the inception report	29th July
7	Data collection & data analysis	1st-20th August
8	Internal meeting at DAI to present work progress and feed back	16th August
8	Submission of draft report by e-mail	24th August
8	Internal meeting at DAI to present draft report	26th August
10	Feedback from DAI on the draft report	30th August
11	Submission of final report	After feedback from DAI

APPENDIX 2: QUESTIONNAIRES

ECONOMIC BASELINE SURVEY IN FIVE TARGETED COMMUNITIES SURROUNDING NYUNGWE NATIONAL PARK

COMPREHENSIVE SURVEY QUESTIONNAIRE.

Questionnaire A: Cooperatives Members

SECTION 1: PERSONAL /BASIC INFORMATION

Respondent's Profile:

Respondent Names.....

Respondent Number _____ Date:.....

Physical location: District: Sector:..... Cell:.....

Sex: 1=Men 2=☐omen ☐

1. Age: (Tick where appropriate)

0-14	15-29	30-44	45-59	60-74	75 and above

2. Highest level of academic education:

No	Qualification	✓
a	Not gone to school	
b.	Primary School	
c.	Secondary School	
d.	Certificate/Diploma	
e.	Undergraduate degree	
f.	Masters degree	
g.	Post Graduate Diploma	
h.	Doctorate	
i.	Other	

3. Marital Status: Married ☐ Single ☐ Divorced ☐ Separated ☐ Widowed ☐

4. Number of years of being married/divorced/separated & widowed: _____

5. Please tell us how many dependants you have.

6. Type of occupation

No	Occupation	✓
a.	Farmer	
b.	Businessman	
c.	Fisherman	

d.	Teacher	
e.	Handicraft Artisan	
f.	Housewife	
g.	Any Other	
i.	Other	

SECTION 2: HOUSEHOLD DATA

2.1 Household Characteristics

- 11 Does your household own any agricultural land? Yes-1 No-2
 i. If yes, how much land does the household own (hectares)?.....
 12 Which of the following types of livestock do you have? Also indicate the number?

	Type	Tick ✓	Number
1.	Cow		
2.	Goats		
3.	Pigs		
4.	Chicken		
5.	Rabbits		
6.	Any Other		

If yes are they for commercial or subsistence income.

2.2 Demographic Characteristics of Household Members

Name	Age	Sex	Relationship to the respondent	Marital status	Education	Occupation

2.3 Household Income and Expenditure (2010)

Source of Income		
a)	Income from Agriculture and Allied Activities	<u>Amount in Rwf</u>
b)	Income from farming Activities	
c)	Income from Livestock, Pigs ,Goats , Poultry etc	
	Total Income from Agriculture and Allied Activities	
d)	Income from Trade/Business/ Petty Shops	
e)	Income from self employment like Artisan	
f)	Salary income (of all the household members who have salaried income).	
g)	Income from Rent, Interest, Dividends.	
h)	Transfer Income (remittance from household members living in other places]	
i)	Income from cooperative Activities	
	Total Income from All Sources	

NB: Income is derived by deducting the Expenses from Production

2.4 Household Savings, Borrowings and Lending's During the Last One Year (2010)

a	Did the household save in the following forms during the last one year? Yes- No- If yes, how much did the Household save?		
b	Type of savings		Amount in Rwf
	Cash / Bank Deposit		
	Cooperative savings		
	Purchase of live stock		
	Purchase of agricultural land		
	Purchase of house/flat/plot		
	Total in Rwf		
c	Did the household borrow any money in the last one year (2010)? Yes No		
d	If yes, how much?		Rwf
e	For what purpose? a. . b. . c. .		
f	Did the Household lend/make remittance to outsiders? Lend money - Yes No Made remittance - Yes No Both		
	If yes, how much?		
	Money lent out	Rwf	
	Money remitted	Rwf	
g	Does the household own any of the following items?	Yes	No
	Bicycle		
	Motor Cycle		
	Car/Jeep/Van		

	House/Flat/Plot		
	Radio / Transistor		
	Television		
	Mobile Phone		

2.5 Total Household Consumption Expenditure.

2.5.1 Expenditure on Food Items during Last Month.

	Unit of measurement	Quantity consumed	Unit Cost	Total Cost
Cereals	Kg			
Pulses	Kg			
Edible oil	Liters			
Milk and milk products	Liters			
Sugar	Kg			
Beverages (Tea, Coffee etc)				
Vegetables and Fruits				
Meat, Fish and Eggs				
Processed food				
Other food items				
Total Food Items				

2.5.2 Expenditure on Non-Food Items during Last Month.

Item	Total Cost
Fuel (Kerosene, firewood etc.)	
Electricity(cash Power)	
Security	
Transport	
Entertainment	
Telephone,	
Toilet articles (toothpaste, soap, detergents)	
Total Non Food Items.	

2.5.3 Other Annual Consumption Expenditure during the Last One Year

Item	Total Spent
Clothing	
Footwear	
Durable goods	
Education of Children	
Medical	
Travel	
Repairs and maintenance of house, vehicles etc	

Other major expenditure (e.g. wedding, social events etc.)	
Total (Other Annual Exp.)	

2.5.4 Time Use Pattern of Members Household Age >12 years

	Member 1	Member 2	Member 3	Member 4	Member 5	Member 6	Member 7
5-6 A.M.							
6-7 A.M.							
7-8 A.M.							
8-9 A.M.							
9-10 A.M.							
10-11 A.M.							
11A.M.-12 Noon							
12-1 P.M.							
1-2 P.M.							
2-3 P.M.							
3-4 P.M.							
4-5 P. M.							
5-6 P.M.							
6-7 P..M.							
7-8 P.M.							
8-9 P.M.							
9-10 P.M.							
10 P.M. to 5 A.M							

Codes:

Paid Work outside home -01
 Paid work within home (sewing, embroidery etc)-02
 Any other productive work (care for animals, poultry, kitchen garden etc)-03
 Travel to work -04
 Fetching water, fodder, fuel etc -05
 Household work including cooking, cleaning the house, washing & ironing clothes etc)-06
 Eating and drinking -07
 Personal hygiene (bathing, washing etc) -08
 Shopping for household goods -09
 Participation in social and cultural activities (going to Church etc), Socializing etc -10
 Reading Newspaper, Magazines, books etc -11
 Recreation (watching T.V, listening to music, hobbies etc)-12
 Going to school -13
 Studying, learning etc -14
 Physical care for children (washing etc) -15
 Teaching /accompanying children to school -16
 Care of elderly/disabled -17
 Care of HIV/AIDS patient -18
 Caring for a sick member of the Household -19
 Rest & Relaxation -20
 Sleeping -21
 Any other -99

SECTION 3: SPATIAL DATA

3.1 What type and number of buildings are on the land?

a.

3.2 What is the year of construction of the buildings/ structures?

3.3 What is the type of building material for the house?

Floor material	Wall material	Roof material
Cemented	Natural stones	Corrugated iron sheets
Earth	Timber	Tiles
Other (specify	Mud	Other (specify) ---

3.4 Do you have *mutuelle* for your family members? ☐es ☐No

3.5 Are you receiving pension from CSR? Yes ☐ No ☐

3.6 What is the form of land ownership?

- a. Own ☐
- b. Leased ☐
- c. Government land/property ☐

3.7 Is the size of land your family occupies adequate for your needs?

- a. Yes ☐
- b. No ☐

3.8 What kind of ownership document do you have for your land?

- a. Land Title Number.....
- b. Contract of allocation
- c. Others

SECTION 4: FINANCIAL AND ECONOMIC DATA

4.1 Please tick the right option regarding your family income level.

a) < Rwf 10,000	
b) Rwf 10,000 –Rwf 30,000	
c) Rwf 30,000 – Rwf 60,000	
d) Rwf 60,000 – Rwf 100,000	
e) > Rwf 100,000	

4.2 Percentage income utilization.

	Amount in Rwf	% Expenditure
Educational expenses		
Insurance expenses		
Utilities cost expenses		
Food items		

4.3 What activities do other members of your family do that financially contribute to the household's income?

Person/relationship	Activity	Full time or Seasonal	If Seasonal How many days per week or seasonally is this job

4.4 Do you participate in other income generating activities? Yes No

a. If yes Which ones

- i. .
- ii. .
- iii. .

SECTION 5: INFRASTRUCTURE DATA

5.1 Where do you get your water?

Public well/River	
How far is the well /River from your House	
Water station (Buy the Water)	
How much does it cost to buy water if you do buy it per day ?	
Water station(free Water)	
Rain water harvesting	

5.2 What are the sources of energy for cooking and lighting at your home in 2010?

	Cooking	Lighting
Firewood		
Charcoal		
Kerosene		
Biogas		
LPG		
Electricity		
Solar Power		

5.3 Utilities Cost /per Month

Utility	Rwf
Water	
Electricity for Lighting	
Cooking	
Total	
What % does the utilities cost represent for your total Expenditure Budget.	

SECTION 6: COOPERATIVE DATA

- 6.1 When did you join the cooperative?
- 6.2 How much money did you contribute as membership fee to join the cooperative?.....Rwf
- 6.2 What is your role in the cooperative?
- 6.3 What benefits do you get from being a member of the cooperative?

Social	Economic

- 6.4 Where would you want to see the cooperative in the next two years?
- 6.5 How much of your Household income comes from the cooperative?
- 6.6 Has your household income improved since you joined the cooperative?
- 6.7 What Assistance would you want to see the cooperative get?.
- i. .
 - ii. .
 - iii. .

**ECONOMIC BASELINE SURVEY IN FIVE TARGETED COMMUNITIES SURROUNDING
NYUNGWE NATIONAL PARK
COMPREHENSIVE SURVEY QUESTIONNAIRE
PROFILE OF INTERVIEWED**

Questionnaire B: Cooperative Leaders (Face To Face Interviews)

<u>Name of persons involved in FGD</u>	<u>Function in Cooperative</u>	<u>Level of education</u>	<u>Contact</u>

SECTION 1: GENERAL DEMOGRAPHIC INFORMATION OF THE COOPERATIVE

1. Names of Respondent:
2. Designation in the organization:
 - i. Name of cooperative:
 - ii. Province:
 - iii. District:
 - iv. Sector:
3. Type of Business:.....
4. Cooperative's main line of activity:.....
5. Is your cooperative legally registered?
6. If yes, at which level is your cooperative legally recognized?.....
7. What is the gender composition of the cooperative?
Men:..... Women:.....
8. What role do women play in your cooperative?.....
9. How many members are on the executive committee of your cooperative?.....
10. How many women are on the executive committee of your cooperative?.....

11. What is the leadership role of women in your cooperative?.....

.....

12. Is the current work/activity part of the idea /objective on creation of this organisation?

Yes ____ No ____

13. If No, can you explain the reasons for this deviation/change?

.....

14. What are your Cooperative Priorities in the next two years

Priority 1.....

Priority 2.....

Priority 3.....

Priority 4.....

Priority 5.....

15. Have the priorities been agreed upon with all the members? Yes No

16. Please list five key challenges facing cooperative activities and incomes.

i. .

ii. .

iii. .

iv. .

v. .

17. Please list What you wish to be done to improve cooperative activities and incomes

i. .

ii. .

iii. .

iv. .

v. .

SECTION 2: FINANCE AND ECONOMIC DATA

18. What are the current contributions by members? Rwf

19. What is the organisation's capital base? Rwf.....

20. Can you explain the organisation's financial status in the past 3 years?

Type		Year		
		2008	2009	2010
Earnings				
Costs	Indirect			
	Direct			
Profit/Loss				

21. If there is an increase in profits, what do you attribute to this rise to? *(Probe for, profits generated from higher productivity, profits generated from savings on costs, profits due growing integration between banks and the cooperative)*

1. .
2. .
3. .

22. If there is a loss, what do you attribute to this loss to?

1. .
2. .
3. .

23. Has the organisation acquired a loan? Yes ____ No ____

24. If yes, elaborate *(Probe for date of acquisition, type of financial institution, collateral requested, and repayment plan).*

25. How do the cooperative profits reach the individual members?

1. .
2. .
3. .

26. What do you say are the major benefits to the members belonging to the cooperative?

1. .
2. .
3. .

SECTION 3: PRODUCTION AND MARKET DATA

27. Can you briefly tell us about the organisation's product(s)/service(s) on offer?

1. .
2. .
3. .
4. .

28. Can you elaborate on your current market of your product(s),

.....

.....

.....

29. How do you plan to increase your current customer base

30. Are there any new products /Services that you plan to offer in the next two years

.....

.....

.....

SECTION 4: PARTNERSHIPS

31. Since inception, has the organisation received any form of support from various partners
e.g. government /Banks/ International Funding agencies, NGO or any other donors?

Yes ____ No ____

32. If yes specify the partner:

1. .
2. .
3. .

33. What assistance did you receive (*Tick appropriately*)

Direct Grant _____	Repayable Grant _____
Soft Loans _____	Facilitated access to resources _____
Shared cost mechanisms _____	Subsidies _____
Advice and Information _____	Competitive awards schemes _____
Other _____	

34. In What form was this support useful/or not useful to the organisation in its line of business activities?

.....

35. What form of Support would you like to get from the “Nyungwe Nziza” project in relationship to your set priorities?

.....

36. Any other issues you would like to add or other suggestions apart from What we have discussed

.....

**ECONOMIC BASELINE SURVEY IN FIVE TARGETED COMMUNITIES
SURROUNDING NYUNGWE NATIONAL PARK
COMPREHENSIVE SURVEY QUESTIONNAIRE**

Questionnaire C: Sector leaders and other Opinion Leaders (Face to Face interviews)

SECTION 1: GENERAL DISTRICT/SECTOR INFORMATION

Name of persons involved in FGD	Function in district/Sector	Contact

1. Location of the respondent:
 - v. Province:
 - vi. District:
 - vii. Sector:

2. How and when was your District/Sector involved with the Nyungwe National Park program?
 - a. .
 - b. .
 - c.

3. Does your District/Sector benefit from Nyungwe National Park? Yes No

4. If yes kindly highlight the benefits.....

.....

.....

5. Has the district/sector benefited from NNP's revenue sharing program? Yes No

6. If yes kindly highlight the impacts of the revenue to the communities

.....

.....

.....

.....

SECTION 2: COOPERATIVES INFORMATION AND ACTIVITIES

7. Are there cooperatives in your district/sector which are involved in working with **RDB** or other Nyungwe Conservation Project? Yes No

8. If yes can you briefly describe how the cooperatives in your sector and district are involved in working with RDB or other Nyungwe Conservation Project?

.....

.....

.....

9. Can you tell us about the effectiveness of Community based Eco tourism activities in your District/Sector in Bio diversity and Income generation by communities and cooperatives?

.....

.....

.....

10. How do you rate the level of involvement of Community based Eco tourism in your district or Sector? Is it

High Medium Low

11. How would you rate the leadership of the cooperatives in your area?

Very Good Average Fair Poor

12. What are the district /sector priorities in assisting the Cooperatives in the next two years.

Priority 1.....

Priority 2.....

Priority 3.....

13. In your opinion please list three key challenges facing cooperative activities and incomes in your District / Sector.

vi.

vii.

viii.

14. Please list What you wish to be done to improve cooperative activities and incomes in your District /Sector

vi.

vii.

viii.

15. What do you say are the major benefits to the members belonging to the cooperatives?

a.

b.

c.

16. Any other issues you would like to add or other suggestions apart from What we have discussed

17. How have you supported the Eco-tourism related cooperatives at sector/district level

a.....

b.....

c.....

APPENDIX 3: ENUMERATORS ITINERARY

1. Moses Bigirabagabo

Cooperative to be interviewed: BANDA PNPT

DAI field officer: Eric Maniraguha, Tel: 0788754731

Cooperative Contact: Ignace Hatangimana: 0785369704

Interview dates:

Cooperative members and leaders

- Friday 29th July
- Sunday 31st July
- Monday 1st August

Continue till all not covered

Interview site: Cooperative camping site in Nyungwe/Banda forest

Opinion Leaders: 5th – 10th August 2001

2. Oreste Rugambwa

Cooperative to be interviewed: CYAMUDONGO TP

DAI field officer: Eric Maniraguha, Tel: 0788754731

Cooperative Contact: Leonard Birikunzira: 0725354786 (Chairperson)

Interview Dates:

Cooperative members and leaders

- Monday 1st August
- Tuesday 2nd August
- Wednesday 3rd August

Continue till all are covered

Interview site: Cooperative office, near Gatara cell. Office & genocide

Opinion Leaders: 5th – 10th August 2001

3. Eric Nshimiyimana

Cooperative to be interviewed: HANDICRAFT WOMEN COOPERATIVE - Kitabi

DAI field officer: Alice Mutabazi, Tel: 0788598511

Cooperative Contact: work with DAI field officer

Interview Dates:

Cooperative members and leaders

- Monday 1st August
- Tuesday 2nd August
- Wednesday 3rd August

Continue till all members are covered

Interview site: Entrance of the forest, next to previous cooperative, at RDB house

Opinion Leaders: 5th – 10th August 2001

4. Eric Nshimiyimana

Cooperative to be interviewed FRIENDS OF NYUMGWE - Kitabi

DAI field officer: Alice Mutabazi, Tel: 0788598511

Cooperative Contact: Jean Baptise Bazambanza: 0788845941

Interview site: Kitabi, next to Sector office, in a stock hall

Interview Dates:

- Thursday 4th August
- Friday 5th August
- Saturday 6th August

Continue if all members are covered

Opinion Leaders: 7th – 10th August 2001